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**Integrated Comment Responses Supporting Final  
Rule: Power Reactor Security Requirements**

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**U.S. Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation**

**June 2008**

UNITED STATES NUCLEAR REGULATORY COMMISSION

POWER REACTOR SECURITY REQUIREMENTS

INTEGRATED COMMENT RESPONSES

The U.S. Nuclear Regulatory Commission (NRC) is amending the security requirements for nuclear power reactors. The security requirements being amended by the power reactor security rulemaking are: 10 CFR 73.55, 10 CFR 73.56, 10 CFR Part 73 Appendix B, and 10 CFR Part 73 Appendix C. Additionally, the NRC is adding three new requirements to Parts 50 and 73 respectively: 10 CFR 50.54(hh), 10 CFR 73.54, and 10 CFR 73.58. Finally, the rulemaking makes conforming changes to other sections of Part 73, Part 72, Part 50, and Part 52 to 1) ensure that cross-referencing between the various security regulations in Part 73 is preserved, 2) implement cyber security plan submittal requirements, and 3) preserve requirements for licensees who are not within the scope of this rule.

Following the terrorist attacks on September 11, 2001, the NRC conducted a thorough review of security to ensure that nuclear power plants and other licensed facilities continued to have effective security measures in place given the changing threat environment. Through a series of orders, the Commission supplemented the Design Basis Threat (DBT), as well as requirements for specific training enhancements, access authorization enhancements, security officer work hours, and enhancements to defensive strategies, mitigative measures, and integrated response. Additionally, in generic communications, the Commission specified expectations for enhanced notifications to the NRC for certain security events or suspicious activities.

As noted to recipients of the various Commission orders, it was always the Commission's intent to undertake a rulemaking that would codify generically applicable security requirements and update its power reactor security requirements, which had not been significantly updated for nearly 30 years. Thus, on October 26, 2006, the Commission proposed the Power Reactor Security Rulemaking. (71 FR 62664). The proposed rule was published for a 75-day public comment period and, in response to requests, the comment period was extended on two separate occasions (72 FR 480 and 72 FR 8951), finally closing on March 26, 2007.

The Commission received 48 comment letters. In addition, the Commission held two public meetings in Rockville, MD, and Las Vegas, NV on November 15 and 29, 2006, respectively, to solicit public comment. The NRC also held a third public meeting on March 9, 2007, to facilitate stakeholder understanding of the proposed rule requirements and thereby result in more informed comments on the proposed rule provisions.

The Commission also published a supplemental proposed rule on April 10, 2008 (73 FR 19443) seeking additional stakeholder comment on two provisions of the rule for which the NRC had decided to provide additional detail. The supplemental proposed rule also proposed to move from these requirements from Appendix C to Part 73 in the proposed rule to Section 50.54 in the final rule. Three petitions for rulemaking were also considered as part of the power reactor security rulemaking.

The Commission's responses to the received public comments are discussed below.

## **General Issues and Specific Questions Responses to Public Comments**

### **Comment Summary:**

Several commenters generally supported this rulemaking on the basis that it is important to codify the requirements that were imposed on industry after September 11, 2001. In particular, the commenters pointed to the Energy Policy Act of 2005 (EPAAct 2005) requirements as those that need to be codified. Other commenters pointed to specific elements of the rule that they support, such as the inclusion of the requirement to defend against spent fuel sabotage, expanding the licensee's security obligations to include the owner controlled area (OCA), and the use of enhanced weapons by security officers. The commenters also stated that, if constructed properly, the new rules would not be an undue burden to licensees.

### **NRC Response:**

The NRC agrees with commenters that support the security rulemaking. The NRC notes that while the supporters agreed with elements of this rulemaking, the objectives for the rulemaking were to: make generically applicable security requirements imposed by Commission orders issued after the terrorist attacks of September 11, 2001, based upon experience and insights gained by the Commission during implementation; fulfill certain provisions of EPAAct 2005; add several new requirements that resulted from insights from implementation of the security orders, review of site security plans, and implementation of the enhanced baseline inspection program and force-on-force exercises; update the regulatory framework in preparation for receiving license applications for new reactors; and give consideration to three petitions for rulemaking during the development of the final rule requirements. No changes to the final rule or supporting SOC were made as a result of this comment.

### **Comment Summary:**

Commenters opposed the rulemaking for various reasons. Commenters believe the rulemaking is designed to codify an inadequate status quo, while other commenters did not believe the rulemaking incorporated certain provisions of EPAAct 2005 relating to the conduct of security-based drills and conflict of interest. Other commenters expressed concern over what are viewed as weakened requirements that govern MOX fuel. On the other hand, there were several commenters who stated that the proposed language creates several new requirements which will impact licensees' current plans, which have already been approved by the NRC, and these new requirements could divert security attention away from active defense and cause licensees to incur significant additional expenditures. Commenters expressed concern regarding the broad language used for some requirements, and stated that the NRC should revise the proposed rule to minimize misinterpretations and to avoid the inadvertent creation of new requirements.

### **NRC Response:**

The NRC disagrees with the comments that suggest this rulemaking codifies the status quo. As discussed in the comment response above, this rulemaking goes beyond codifying current practices and instead incorporates lessons-learned from the implementation of the security orders, review of site security plans, and implementation of the enhanced baseline inspection program and force-on-force exercises. The NRC disagrees that the rulemaking does not incorporate security-based drills and conflict of interest provisions of EPAAct 2005. The final rule

performance evaluation program requirements, relocated to Appendix B VI.C.3, address both of these requirements. The NRC disagrees that the MOX fuel requirements are weakened security requirements and instead, the NRC adjusted the requirements governing MOX fuel to maintain adequate security for this fuel based on the relevant security issues. With regard to the commenters who expressed concern that the rule language is too broad, or that new requirements are being introduced that could divert attention, the NRC, where possible (within the limitations of SGI), revised the language and moved some provisions to address these issues. These issues are addressed in specific comment responses for each requirement.

#### **Comment Summary:**

Many of the comments from industry identify as a primary concern with the proposed power reactor security rulemaking that the Commission did not simply “codify” requirements contained in the various security orders issued during the several years after September 11<sup>th</sup>. The Nuclear Energy Institute (NEI), for example, asks, “Why were these new provisions not imposed in 2003 when the Commission issued orders to bolster security in light of the increased threat environment?” There are a number of justifications that clearly support the Commission’s proposal of security measures in this proposed rule that exceeded what was previously imposed by Order.

#### **NRC Response:**

As an initial matter, the suggestion that “...the primary goal of the rulemaking was to codify the post-9-11 orders into security regulations,” as stated by several industry commenters, is misleading and arguably inconsistent with the NRC’s obligations under the Administrative Procedure Act (APA). First, as stated in the proposed rule, one goal of this rulemaking was to “make generically applicable security requirements imposed by Commission orders,” (71 FR 62664), but that was by no means the only goal. As clearly stated, the Commission also intended to implement “several new requirements that resulted from insights from implementation of the security orders, review of site security plans, and implementation of the enhanced baseline inspection program and force-on-force exercises.” These insights were obviously not available to the Commission when it issued the original set of security orders in 2002 and 2003, and it would be a serious opportunity wasted if the Commission did not attempt to improve the rule with the benefit of these lessons.

In addition, another key objective of this rulemaking was to “update the regulatory framework in preparation for receiving license applications for new reactors,” (71 FR 62664). The current security regulations have not been substantially revised for nearly 30 years. Prior to September 11<sup>th</sup>, the Commission had already undertaken an effort to revise these dated requirements, but that effort was delayed for obvious reasons. Thus, this rulemaking picks up where the NRC’s previous pre-September 11<sup>th</sup> efforts left off. It is important to keep in mind that this rulemaking will have a much wider impact than simply its effect on current reactors. New reactor applicants will need clearly articulated requirements that the former regulation could not provide. Additionally, the revisions to this rule were intended to provide it with needed longevity, so that the NRC would not be obligated to return to the rulemaking process in the next several years for failure to be forward thinking and anticipate future developments or needs in physical protection.

As a legal matter, the APA prevents the agency from simply “codifying” orders into a regulation, but instead requires that our rules are published for public comment in the Federal Register and be subjected to a public process. To suggest that the agency could simply take a set of requirements it imposed as interim measures under extraordinary circumstances and make them into a generic set of regulations is inconsistent with those legal obligations.

In addition, the initial Interim Compensatory Measure (ICM) Order (EA-02-026) was issued on February 25, 2002, (67 FR 9792) – a mere 5 months after the events of September 11<sup>th</sup>. Though several additional security orders were issued subsequent to the ICM Order, the ICM Order contained the bulk of security requirements. However, the ICM Order and the letter transmitting the Order were very clear: the measures imposed by Order were “interim requirements” and that they would remain in effect “...until the Commission determines that other changes are needed following a comprehensive re-evaluation of current safeguards and security programs,” (67 FR 9792). It was always the Commission’s intent to revisit the adequacy of these interim security measures through a comprehensive rulemaking process that took advantage of stakeholder input, Commission experience, and the benefit of hindsight. The proposed rule reflected this effort, and therefore included a number of “new” requirements that went beyond the Order. The agency is not bound to a set of requirements it developed to the best of its ability and which it believed were prudent at the time, but nevertheless developed under extraordinarily difficult circumstances.

In sum, though a key objective of this rulemaking was to use the requirements of previous security orders as a baseline, the Commission by no means intended to simply “codify” those orders.

**Comment Summary:**

One commenter stated that the rule broadly imposes requirements on “any area” or “all areas” when previously it specified the specific area. Similarly, the commenter said the rule imposes requirements on “any barrier established to meet the requirements of this section” when the requirement is clearly not applicable to all such barriers. The same commenter stated that the NRC has admitted that the threat environment has not changed since the EPAct of 2005, but has still used the changing threat environment as justification for adding new requirements throughout this rulemaking.

**NRC Response:**

The NRC addressed the commenter’s concern regarding requirements that are broadly imposed on all areas (of the facility) by revising the final requirements to be more area specific. The NRC agrees with the commenter that the basis for new requirements in this rulemaking (new requirements that go beyond previously imposed post September 11 order requirements) is not a changing threat environment. Instead new requirements are justified as cost-justified safety enhancements per the criteria in 10 CFR 50.109(a)(3). Changes to implement this response are in the specific requirements sections.

**Comment Summary:**

Several commenters noted that the following words and phrases need to be more clearly defined: entrance, unauthorized activities, unauthorized materials, significant core damage, spent fuel sabotage, early detection, technology, computer technology, video technology, components, and equipment.

**NRC Response:**

In the specific areas where stakeholders suggested that terms should be defined, NRC decided to address these issues by tightening the associated requirement (within the limitations of SGI), and/or supporting the requirements with guidance that addresses the issue. Refer to the comment responses associated with each of the relevant requirements.

**Comment Summary/Specific Request for Feedback:**

The NRC solicited public comment on a number of specific issues, but received input on only one of these specific issues. Specifically, the NRC requested stakeholders to provide insights and estimates on the feasibility, costs, and time necessary to implement the proposed rule changes to existing alarm stations, supporting systems, video systems, and cyber security. In response, a commenter stated that the feasibility of establishing a cyber security program for industrial control systems has been demonstrated by various electric utilities, chemical plants, refineries, and other facilities with systems similar, if not identical, to those used in the balance-of-plant in commercial nuclear plants. The commenter stated that the time and cost necessary to implement a control system cyber security program is dependent on the scope and findings and discussed the technologies and programmatic approaches that can be pursued to augment NEI 04-04, "Cyber Security Program for Power Reactors," recommendations.

**NRC Response:**

The NRC appreciates this feedback, and focused considerable attention on cyber security requirements in developing the final rule requirements. The cyber security guidance (SGI) developed by NRC goes into greater detail than the current version of NEI 04-04 and it recognizes both the changing technology and the nature of the cyber threat.

## **Regulatory Analysis Issues Responses to Public Comments**

### **Comment Summary:**

Commenters indicated that the regulatory analysis underestimates the costs of all the new requirements in the proposed rule, and that the one-time and annual costs for licensees were skewed.

### **NRC Response:**

The NRC agrees in part. Regarding the cost estimates supporting the final rule regulatory analysis, it is the NRC's objective to make decisions based on complete and accurate cost information. This objective is particularly important for this rulemaking since the costs are an integral part of the decision to backfit the new requirements under § 50.109(a)(3). Where there was information indicating that the cost estimates were low either due to information provided from external stakeholders or due to comments that revealed that the provisions involved more effort to implement than originally stated in the proposed rule regulatory analysis, the NRC revised the costs estimates consistent with the spirit of this comment. Refer to the final rule regulatory analysis for specific changes.

### **Comment Summary:**

A commenter indicated that the fundamental approach used for impacts was to multiply the cost of the impact by the anticipated number of sites affected, and then divide by the total number of sites to get a per site impact. The commenter argued that this approach is misleading. The commenter also indicated that the regulatory analysis identified the new requirements, yet in many instances only a percentage of sites were assumed to be impacted. The commenter asked how a new requirement can only apply to a percentage of the 65 operating reactors.

### **NRC Response:**

The NRC used the standard approach for calculating costs/impacts and averaging those costs on a site-specific basis. The NRC recognizes that in some cases (i.e., where there is a small percentage of sites that would incur an impact) this approach may be somewhat misleading. Where applicable, the NRC revised the final regulatory analysis to note where these situations exist, and provided the impacts for the limited number of sites that the NRC estimates would be impacted.

Regarding why only a small percentage of sites are impacted by a new requirement, the NRC attempted to account for the current sites that already have the feature implemented (even though it is technically not a requirement) so that a true estimate of the requirement impact was provided. Recognizing that all new requirements have some impact on licensees (regardless of whether the licensee is currently implementing a similar requirement as a result of a security plan commitment), the NRC added an additional cost to the final rule regulatory analysis that addresses the impact that licensees would incur. This impact is to estimate the costs associated with an overall review of security plans and implementing procedures to update them to the new governing requirements.

### **Comment Summary:**

The commenter discussed that not all new requirements were evaluated by the regulatory analysis. The commenter stated that there are numerous examples where the rule language

has been moderately to extensively changed, and are not justified or accounted for in the regulatory analysis. The commenter identified what he considers the “new” requirements in the proposed rule.

**NRC Response:**

Each of the identified new requirements were in 10 CFR 73.55. With regard to the specific list of requirements, in all cases except one, the NRC has either revised the associated final rule requirement language to resolve the issue (i.e., the NRC did not intend that the listed item be a new requirement and so revised the language to remove the unintentional requirement) or, where a language revision is not possible (due to the limitations of SGI), the NRC has issued draft supporting guidance that clarifies the intent for the listed requirement such that it should no longer be viewed as a new requirement. The only exception is the requirement that touches upon video assessment/playback where the NRC is imposing a new requirement. This new requirement is addressed in both the proposed and final rule regulatory analysis.

The NRC does note that there are a number of new requirements in the final rule that are current practices. These practices have been implemented throughout industry following an NRC approved NEI template that incorporated the practices into security plans which the NRC reviewed and approved following the issuance of the post 9/11 orders. Requiring these current practices does impose an impact on licensees, and the NRC accounts for that impact in the final rule regulatory analysis (i.e., the estimated impact is to account for the review and revision of plans and supporting procedures to reflect the new requirements).

**Comment Summary:**

During a public meeting, a commenter asked if the NRC had a matrix that would show how many new requirements there are in the proposed rule.

**NRC Response:**

As suggested during the public meeting, the regulatory analysis is the document that shows new requirements and their costs.



## **10 CFR 50.54(hh) Responses to Public Comments**

### **Comment Summary:**

The commenters indicated that three statements in the section by section analysis (supporting 10 CFR 50.54(hh)(1)) are new expectations. This comment referred to the description that indicated licensees would need to 1) determine how much time is necessary to evacuate their protected areas, 2) validate the accuracy of that determination using no-notice drills, and 3) incorporate the lessons learned from those drills into the site-specific procedures. Additionally, the commenters stated that suspension of security measures via 10 CFR 50.54(x) would need to be considered when conducting no-notice protected area evacuations.

### **NRC Response:**

The Commission agrees in part with this comment. It is expected that licensees will conduct an analysis and develop a decision-making tool for use by shift operations personnel to assist them in determining the appropriate onsite protective action for site personnel for various warning times and site population conditions (e.g., normal hours, off normal hours and outages). This decision-making tool shall be incorporated into appropriate site procedures. It is expected that this tool will be routinely used in drills and exercises and that any deficiencies or weaknesses identified will be corrected in accordance with 10 CFR 50.47(b)(14) and Appendix E to Part 50, Section (IV)(F)(g). Depending upon the methodology used to conduct the analysis, it may not be necessary to suspend security measures pursuant to 10 CFR 50.54(x) or 10 CFR 73.55(p), as applicable. The Commission revised the SOC language to clarify NRC intent.

### **Comment Summary:**

A commenter stated that the requirement in proposed 10 CFR 50.54(hh)(1)(ii) "Maintenance of continuous communication with applicable entities" could potentially be a resource and task burden for site response organizations depending on the duration of the pre-event period. The commenter suggested that this requirement be revised to read: "Allow for periodic updates during the pre-event period as necessary to the applicable entities." Another stakeholder with a similar concern suggested "Maintenance of communications with applicable entities as necessary and as resources allow."

### **NRC Response:**

The NRC agrees in part with these comments. The goal is for threat notification sources to be able to communicate pertinent information to licensees, not to unnecessarily burden licensee personnel with redundant requirements. As a result, the Commission changed 10 CFR 50.54(hh)(1)(ii) to read, "Maintenance of continuous communication with threat notification sources". Examples of threat notification sources are the Federal Aviation Administration (FAA) local, regional or national offices; North American Aerospace Defense Command (NORAD); law enforcement organizations; and the NRC Headquarters Operations Center. If a licensee encounters a situation where multiple threat notification sources (e.g., FAA, NORAD and NRC Headquarters Operations Center) are providing the same threat information, licensees would only be required to maintain continuous communication with the NRC Headquarters Operations Center. The Commission also revised the SOC language to clarify the purpose of this requirement.

### **Comment Summary:**

The commenter stated that the requirement in proposed 10 CFR 50.54(hh)(1)(iii) is redundant with existing requirements in 10 CFR part 50 Appendix E and that the NRC needs to be mindful of redundancy issues and provide clarifying language when the Emergency Planning regulations are revised to acknowledge that the provision is already addressed in the imminent threat procedure.

**NRC Response:**

The Commission disagrees with this comment. The intent of the rule is to ensure that licensees contact offsite response organizations as soon as possible after receiving aircraft threat notifications. There is no expectation that licensees will complete and disseminate notification forms, as the rule text implied. Consequently, the Commission replaced the term “Notifications of” with “Contacting” in the rule text and SOC language.

**Comment Summary:**

The commenter indicated that the requirement in proposed 10 CFR 50.54(hh)(1)(iv) that states “onsite protective actions to enhance the capability of the facility to mitigate the consequences of an aircraft impact” appears to be redundant with a portion of the Emergency Preparedness draft Preliminary rulemaking (paragraph I “Onsite Protective Actions During Hostile Action Events”) since an aircraft threat would constitute a hostile action. The commenter stated that NRC needs to be mindful of redundancy issues and provide clarifying language when the Emergency Planning regulations are revised to acknowledge that the provision is already addressed in the imminent threat procedure.

**NRC Response:**

The Commission agrees is part with this comment. Paragraph 50.54(hh)(1)(iv) pertains to operational actions that licensees can take to mitigate the consequences of an aircraft impact; the NRC did not intend this requirement to include emergency preparedness-related protective actions. The Commission removed the term “protective” from the rule text to eliminate this ambiguity.

**Comment Summary:**

The commenter declared that the requirement in proposed 10 CFR 50.54(hh)(1)(v) that states, “...measures to reduce visual discrimination of the site relative to its surroundings or individual buildings within the protected area,” should be deleted. The commenter believes that this measure was previously deemed to be prohibitively expensive, and that imposing the requirement at this time requires a backfit analysis.

**NRC Response:**

The NRC disagrees with this comment. As explained in the SOCs, licensees would be required to either utilize centralized lighting controls, or in the absence of centralized controls, develop prioritized routes that allow personnel to turn off different sets of lights depending on available time, when appropriate. For the first option, the NRC is aware that the resources (i.e., centralized lighting controls) are already available for some licensees; the second option is a reasonable alternative for those licensees without centralized controls. Consequently, neither option requires a “prohibitively expensive” capital investment or a backfit analysis. The rule language and the SOCs were not revised.

**Comment Summary:**

The commenter stated that the proposed 10 CFR 50.54(hh)(1)(vi) seems to add new requirements and terminology. The commenter notes that “rapid reentry” is a new term, and

that it is not necessary for all personnel initially evacuated from the protected area or all offsite responders to rapidly reenter/enter the protected area. The commenter suggests that “rapid reentry should apply only to personnel essential to mitigate the event.

**NRC Response:**

The Commission agrees with this comment. The intent of this requirement is to ensure appropriate onsite personnel and offsite responders are not unnecessarily delayed by routine protected area entry processing during an event. The Commission changed 10 CFR 50.54(hh)(1)(vi) to read, “...rapid entry into site protected areas for essential onsite personnel and offsite responders who are necessary to mitigate the event...”. The Commission also revised the SOCs to clarify the purpose of this requirement.

**Comment Summary:**

The commenter stated that the requirement in proposed 10 CFR 50.54(hh)(1)(vi) discussing the pre-staging and dispersal of equipment and personnel looks like it is redundant with a provision in the draft Emergency Preparedness preliminary rulemaking (which the commenter describes). The commenter stated that the NRC needs to be mindful of redundancy issues and provide clarifying language when the Emergency Planning regulations are revised to acknowledge that the provision is already addressed in the imminent threat procedure.

**NRC Response:**

The NRC agrees with this comment. The term, “pre-staging”, often connotes repositioning of personnel or equipment during the planning phase in preparation for an event. The Commission intended to require licensees to disperse essential personnel and equipment to pre-identified locations after receiving potential aircraft threat notifications, but prior to actual aircraft impacts, when possible. The Commission revised the rule text and SOC language. The draft Emergency Preparedness rule will reference 10 CFR 50.54(hh)(1)(vi), as appropriate, to avoid redundant requirements.

**Comment Summary:**

The commenter stated that the proposed 10 CFR 50.54(hh)(2)(i) discusses the need for licensees to have fire fighting strategies for dealing with loss of large areas of the plant due to explosions and fires and that this provisions looks like it is redundant with a provision in the draft Emergency Preparedness preliminary rulemaking (which the commenter describes). The commenter stated that the NRC needs to be mindful of redundancy issues and provide clarifying language when the Emergency Planning regulations are revised to acknowledge that the provision is already addressed in the imminent threat procedure.

**NRC Response:**

The Commission agrees with the intent of the comment, that there should not be redundant requirements. However, in this instance, the Commission does not believe there is an overlap. Paragraph 50.54(hh)(2)(i) provides the requirements for response to loss of large areas of the plant due to explosions or fires. The proposed Emergency Preparedness rule contains requirements for drills and exercises that would test this response capability.

**Comment Summary:**

The commenter stated that the final rule should include an applicability statement similar to the following: “This section does not apply to a nuclear reactor facility for which the certifications required under 10 CFR 50.82(a)(1) have been submitted.” The commenter believes that it is inappropriate that 10 CFR 50.54(hh) should apply to a permanently shutdown, defueled reactor

where the fuel was removed from the site or moved to an Independent Spent Fuel Storage Installation.

**NRC Response:**

The NRC agrees. The requirements of 10 CFR 50.54(hh) do not apply to any current facilities in decommissioning, and the requirements do not need to be applicable to future decommissioning facilities for which certifications will be filed under 50.82(a)(1) or 52.110(a)(1). The final rule has been revised to reflect this comment.

**Comment Summary:**

The commenter believes the timeframe on which the verification required by 10 CFR 50.54(hh)(1)(i) is based is a vital consideration for protective response. The commenter states that “verification” may be an issue that the NRC and its licensee might wish to keep secure. Additionally, the commenter indicated that the timeframe in which a response must be verified must be clear and it is not currently clear.

**NRC Response:**

The Commission agrees in part with this comment. The verification timeframe is important, and that timeframe should be minimized as much as possible. To that end, on June 25, 2007, the NRC issued Security Advisory 2007-01, Revision 1, which outlines the call verification process between the NRC and its power reactor licensees. The document number is ML070790129, and it is available to the public via the NRC’s Agencywide Documents Access and Management System. The rule text and the SOC language were not revised.

**Comment Summary:**

The commenter, based on its experience, believes that Emergency Planning exercises must assume the potential for communication failures or inadequate communications, and must resolve the shortcomings via exercises, planning, and technology. This comment is provided in reference to 10 CFR 50.54(hh)(1)(ii).

**NRC Response:**

The Commission disagrees with this comment. This requirement in 10 CFR 50.54(hh)(1)(ii) exists to ensure that threat notification sources are able to communicate pertinent information to licensees. As a result of a previous comment, the Commission revised the rule text to clarify that purpose. The remainder of this comment is beyond the scope of this rule. The requirement is not related to emergency preparedness exercises, and this rule requires no test of the emergency notification systems, although other parts of the regulations do (e.g., Appendix E to Part 50). The rule text and the SOC language were not revised.

**Comment Summary:**

In reference to 10 CFR 50.54(hh)(1)(iii), the commenter reiterates the concern that telecommunications remains an unresolved issue, and also states that another issue of communications with on and offsite personnel and response organizations is the potential that these personnel will immediately notify their families and friends, creating severe problems in Emergency Planning that could exacerbate the sheltering and evacuation scenarios.

**NRC Response:**

The Commission disagrees with this comment. It is not clear how the commenter would like the rule to be revised. This particular requirement enables offsite response organizations to take actions deemed appropriate in advance of an onsite impact, which may increase the

effectiveness of the offsite response. The impact on emergency planning is beyond the scope of this requirement. Accordingly, the rule text and the SOC language were not revised.

**Comment Summary:**

In reference to 10 CFR 50.54(hh)(1)(iv), the commenter states that the NRC needs to recognize that the consequences (in terms of offsite releases) of an air attack are a real possibility. As an example the commenter notes that the NRC has not detailed how a radioactive fuel pool fire (from an air attack) would be addressed.

**NRC Response:**

The Commission agrees in part with this comment. The NRC recognizes there could be consequences as a result of a successful aircraft attack on a power reactor facility; therefore, 10 CFR 50.54(hh) was developed to address those consequences. However, details on specific site mitigative actions are not available to the general public. The rule text and the SOC language were not revised.

**Comment Summary:**

In reference to 10 CFR 50.54(hh)(1)(v), the commenter questions the sincerity of this requirement indicating that this would be virtually impossible for reactor facilities, and that the locations of reactor facilities are well known.

**NRC Response:**

The Commission disagrees with this comment. As explained in the SOCs, licensees would be required to either utilize centralized lighting controls, or in the absence of centralized controls, develop prioritized routes that allow personnel to turn off different sets of lights depending on available time, when appropriate. Although the locations of power reactor sites may be well known or a hostile aircraft may be equipped with global-positioning equipment, some visual discrimination of the site or of specific buildings within a protected area may be necessary to conduct a successful attack. Consequently, it is appropriate for power reactor licensees to use readily-available resources to hinder nighttime visual discrimination to the extent possible. The rule language and the SOCs were not revised.

**Comment Summary:**

In reference to 10 CFR 50.54(hh)(1)(vi) and (vii), the commenter suggests that the NRC should assume that 10 to 25 percent of the personnel who evacuate the site will not return (due to the concern that these people will want to see that their families are safe). The commenter also indicates that some of the personnel from offsite agencies will not respond.

**NRC Response:**

The Commission disagrees with this comment. The rule does not assume any particular measures or personnel availability that would have to be included in licensee procedures. Licensees are responsible for determining how they will address a particular situation. Even though the rule requires consideration of the recall of site personnel, it does not specifically require that site personnel actually be recalled for an event, only that, if licensees determine that recalling such individuals is necessary to accomplish their objectives, that their procedures are documented and maintained. Even if the rule were to require recalls, it is mere speculation to assume that site personnel would not perform their duties in accordance with licensee procedures, and the Commission would have no basis to impose an arbitrary limitation on personnel who would normally be counted on to implement the licensees' plans. The rule text and SOC language were not revised.

**Comment Summary:**

In reference to 10 CFR 50.54(hh)(2)(i), the commenter believes that a radioactive fuel pool fire would not be exterminated for days, and that fire fighters are generally not trained for these types of events. As a result, the commenter believes that emergency planning scenarios account for situations where the strategies and guidance do not work and plan accordingly.

**NRC Response:**

The Commission considers this comment to be beyond the scope of this rule since this rule does not require the testing of specific fire-fighting procedures during emergency planning exercises. The procedures required by this rule are not intended to address any particular scenario, but rather to ensure that a licensee is capable of addressing a wide variety of situations that would result in the loss of large areas of the plant due to explosions or fire. No changes were made to the rule or supporting statement of considerations.

**Comment Summary:**

In reference to 10 CFR 50.54(hh)(2)(ii), the commenter indicates that this section is not clear and believes that if the NRC is sincere about strengthening radioactive fuel sites, then the NRC should require that pools and cask storage facilities be within containment.

**NRC Response:**

This comment is beyond the scope of this rulemaking. The Commission has already provided its position on the need for physical protection of spent fuel for aircraft attacks as part of the issuance of the final Design Basis Threat (DBT) rule (72 FR 12705, March 19, 2007). The NRC's position remains unchanged. No changes were made to the rule or supporting statement of considerations.

**Comment Summary:**

In reference to 10 CFR 50.54(hh)(2)(iii), the commenter does not believe that the NRC is sincere with regard to the need to harden fuel pools and fuel storage facilities. Additionally, the commenter does not believe that the NRC has done detailed engineering analyses of airliner crashes. The commenter indicates that the NRC has not taken seriously the suggestions of stakeholders that are intended to address aircraft attacks, and the commenter believes that NRC and its licensees do not really believe that an aircraft attack could result in offsite releases.

**NRC Response:**

This comment is beyond the scope of this rulemaking. As stated above, the NRC has already provided its positions on the need for physical protection of spent fuel for aircraft attacks as part of the issuance of the final DBT rule. The stakeholder's comment implies that NRC should revisit that decision including the engineering work performed to reach the NRC position. The NRC is not reconsidering its position in response to this comment. No changes were made to the rule or supporting statement of considerations.

**Comment Summary:**

The commenter notes that the top of page FR 19447, in the third column, the SOC states "...could be any number of design basis or beyond design basis threat events." The commenter states that since the aircraft impact is a beyond design basis event and the effects from that event are addressed under the aircraft impact rule then the design enhancements to address that event are just "safety enhancements."

The commenter indicates that this is how the SOC characterizes the mitigation of the aircraft impact effects and that they are not needed for “adequate protection.” So the commenter reasons that the effects from the events covered by 10 CFR 50.54(hh)(2) would be events within the design basis threat and would be effects from a large area fire that effects a substantial portion of the plant. Following this logic, the commenter states that since there is no accelerant feeding this postulated fire and there are limited combustibles in a nuclear power plant, it is very difficult to conceive of a fire of this nature that could pose a threat to cooling capabilities.

The commenter believes that the rule needs to bound the area to be considered to either one Appendix R fire area or one Appendix R area and the adjacent areas on the same elevation. This is also true of large explosions created by the DBT. These explosions would be limited in the amount of damage inflicted to the plant because of the limited amount of explosives and would not involve substantial portions of the facility. The commenter then proceeds to state that this rule needs to be focused on security beyond design basis events and should require generic mitigative capabilities that can bound several events. It does not need to cover design basis events within the scope of the Design Basis Threat. Protective strategies developed under 10 CFR 73.55 are in place to protect cooling functions from the threats within the DBT.

Another commenter stated that 10 CFR 50.54(hh)(2) needs to focus on the site response to beyond design basis events and should require generic mitigative capabilities that can bound severe events. The rule need not cover events within the scope of the DBT, those are addressed by 10 CFR 73.55, so the rule should address events which cause a large area fire or impact a substantial portion of the plant. The commenter noted that nuclear power plant fire protection designs that comply with the requirements of 10 CFR 50.48 ensure that multiple safety divisions are not degraded or made inoperable from design basis fires. The commenter provided additional information concerning combustibles to support this conclusion.

**NRC Response:**

The NRC structured 10 CFR 50.54(hh) and the aircraft impact assessment rule to be complementary. First, the NRC notes that both sets of requirements are both addressing beyond design basis events. The 10 CFR 50.54(hh) requirements address a range of beyond design basis events that would include aircraft impacts, whereas the aircraft impact assessment requirements focus specifically on aircraft impacts.

With regard to the fires that the mitigative measures in 10 CFR 50.54(hh) are to address, these are fires that may be beyond the design basis Appendix R type fires. The Commission agrees with the commenter that the current fire requirements are adequate to address fires within the design basis of the facility, including fires that result from the DBT. However, it is the Commission’s position that the requirements in 10 CFR 50.54(hh) provide reasonable assurance of adequate protection of public health and safety by requiring mitigative strategies for a range of beyond design basis accidents. In this sense, the requirements imposed by 10 CFR 50.54(hh) are similar to the evolution of other programs (some regulatory requirements and some voluntary industry initiatives) related to the mitigation of beyond design basis events (e.g., emergency operating procedures, severe accident management guidelines, severe accident features).

**Comment Summary:**

The Commission asked for stakeholder feedback on two questions in the 10 CFR 50.54(hh) Federal Register Notice. In the first question, the Commission asked whether there should be

language added to the proposed requirements that would limit the scope of the regulation (i.e., language that would constrain the requirements to a subset of beyond design basis events such as beyond design basis security events). The commenters indicated that (hh)(1) should be focused on a limited set of beyond design basis events; namely beyond design basis security events. The commenters also noted that the proposed paragraph (hh)(2) has no such limit and is currently unbounded such that the definition of large areas of the plant due to explosions or fire could be expanded to many beyond design basis events. By limiting the rule requirements to a generic set of beyond design basis security events, then strategies and procedures can be developed to focus on the restoration of capabilities needed for mitigating the effects from these events. The commenters then noted that the same restoration capabilities could then be utilized for many other events that were not in the generic set since they would be based on restoration of the stated cooling capabilities in the rule.

**NRC Response:**

The intent of the requirements in 10 CFR 50.54(hh) is to ensure that licensees have formulated mitigating strategies for the potential loss of large areas of the plant and the related potential loss of a variety plant equipment usually relied on to fulfill safety functions. Although the mitigating strategies do not, in and of themselves, ensure that a plant would survive all conceivable events without core damage, the development of plans and alternate means of fulfilling safety functions does serve to provide added assurance for the protection of the public health and safety. Whereas this requirement would not likely have been discussed in the context of adequate protection in the absence of concerns about security events, the mitigating strategies also serve to provide added protection for non-security events associated with the loss of plant equipment due to events such as fires or explosions. The language of 10 CFR 50.54(hh)(2) is, therefore, maintained to be more broad and not put into the context of beyond design basis security events. The Commission would not foresee changes in the mitigating strategies implemented at operating reactors or being developed for new reactors as a result of the current language in 10 CFR 50.54(hh)(2).

**Comment Summary:**

In the second question that the Commission asked for stakeholder feedback, the Commission requested input on what would be the most effective and efficient process to review the applicants' and licensees' procedures, guidance and strategies developed and maintained in accordance with 10 CFR 50.54(hh)(1) and (hh)(2). In response, commenters indicated that the procedures developed to comply with 10 CFR 50.54(hh)(1) will not be available at the time of a license application. These procedures are operations procedures. These procedures would be developed late in the construction of the plant and, along with other operations procedures, should be available for review prior to fuel load. The actions contained within these procedures would not be needed until fuel load when an aircraft threat would be present, so the most appropriate and efficient process for the Commission is to review these procedures as part of the review of operations procedures. The Commission would then review these procedures and strategies as part of their standard construction inspection programs at the construction site.

The commenters then stated that the process for implementing 10 CFR 50.54(hh)(2) would involve Emergency Operating Procedures, Severe Accident Mitigation Guidelines, Extreme Damage Mitigation Guidelines, or other similar guidelines. The strategies that would be developed for addressing (hh)(2) would not be available until all these procedures and guidelines have been developed because they will take credit for some of that guidance. The commenters, likewise, stated that these strategies should be available for NRC review just prior to fuel load and the most appropriate and efficient process for the NRC is to review these



procedures and guidelines as part of the review of operations procedures and beyond design basis guidelines. The commenters stated that the Commission should not review these documents as part of a combined operating license application but the review should be incorporated into the onsite procedural and guideline reviews prior to fuel load.

Additionally, the commenters stated that the NRC need not, and should not impose an additional requirement in 10 CFR 50.34 and 10 CFR 52.80 to include these materials, noting that the information will not be available and that Commission has already reached a conclusion that there would be a license condition on this matter by putting these provisions into 10 CFR 50.54. Finally, the commenters noted that if the NRC requires 10 CFR 50.54(hh) information as part of the licensing process, it should be in the form of a brief summary program description.

**NRC Response:**

For new reactors, the requirements of 10 CFR 50.54(hh)(1) are largely met through the development of operating procedures that will not be developed at the time of a combined license application. In addition, the requirements of 10 CFR 50.54(hh)(1) are prescriptive and are comparable to or exceed the level of detail that would be expected for an operational program in a combined license application. For this reason, the Commission agrees that additional descriptions are not needed for combined license applications and has not included a regulatory requirement for such information to be included in applications.

Regarding the requirements of 10 CFR 50.54(hh)(2), the Commission views the mitigating strategies as similar to those operational programs for which a description of the program is provided as part of the combined license application and subsequently implemented prior to plant operation. The Commission reviews the program description provided in the application as part of the licensing process and performs subsequent inspections of procedures and plant hardware to verify implementation. Because the Commission finds that the most effective approach is for the mitigating strategies, at least at the programmatic level, to be developed prior to construction and reviewed and approved during licensing, a requirement for information has been added to 10 CFR 52.80, "Contents of applications; additional technical information," and 10 CFR 50.34, "Contents of construction permits and operating license applications; technical information."

## 10 CFR 73.54

### “Protection of digital computer and communication systems and networks“

#### **Comment Summary:**

Two commenters suggested that NRC should change the term “emergency preparedness” to “emergency response.” One of the commenters explained that NEI 04-04 “Cyber Security Program for Power Reactors” Revision 1, which is endorsed by the NRC, covers emergency response systems, but not emergency preparedness systems. The commenters believed that by changing the wording in the proposed rule, the NRC will avoid confusion.

#### **NRC Response:**

The NRC disagrees. The NRC revised the final rule to clarify the general performance objective for the protection of digital computer and communication systems and networks against cyber attacks. The Commission added language to clarify the intended scope of what is meant by the proposed rule "safety, security, and **emergency preparedness**". The final rule retains the term "emergency preparedness". The term Emergency Preparedness Systems, is used consistent with 10 CFR Part 50, Appendix E terminology. The equipment embodied within these "preparedness" systems includes a wide variety of plant monitoring systems, protection systems, and plant communications systems used during an emergency event. The term "Emergency Response Systems" is used more specifically to refer only to the "emergency response data system" or ERDS. The ERDS is very specifically identified in 10 CFR Part 50 as the system which provides a data link that transmits key plant parameters. Using the definitions in Appendix E, the term "emergency preparedness" is the most appropriate term because it includes the on-site and off-site emergency communications systems.

#### **Comment Summary:**

One commenter stated that there are several ongoing industry efforts addressing cyber security. These efforts include ISA SP99, NERC CIP, and NEI 04-04. Although the proposed rule is supposed to be consistent with ongoing industry efforts, the commenter explained that only ISA SP99 specifically addresses industrial control systems including those used in commercial nuclear power plants.

#### **NRC Response:**

The NRC agrees that the requirements of this section are intended to be consistent with ongoing NRC and industry efforts. The NRC has developed draft regulatory guidance deemed appropriate to satisfy the requirements of this section of the final rule. In developing draft Regulatory Guide (DG-5022) the NRC considered all available professional literature for applicability.

#### **Comment Summary:**

One commenter noted that the CAS and SAS have cyber connections, but the proposed rule does not include any requirements to address the CAS and SAS cyber connections.

#### **NRC Response:**

The NRC disagrees. The proposed rule 73.55(m)(1) used the phrase "...which if compromised would likely adversely impact safety, security, and emergency preparedness." The CAS and SAS connections are inclusive to term "security". The NRC has revised the final rule in

73.54(a)(1)(ii) to specify security systems and networks, which include CAS and SAS cyber connections that are identified by site-specific analysis as requiring protection.

**Comment Summary:**

One commenter stated that the proposed rule requires the CAS and SAS be functionally equivalent, but cyber security requirements are not specified as one of the features that need to be equivalent.

**NRC Response:**

The NRC disagrees. The cyber security program requirements of this section apply to both CAS and SAS relative to security systems and networks. The final rule 73.55 requirement for functionally equivalent focuses on those functions that must be performed by either CAS or SAS during a contingency event.

**Comment Summary:**

One commenter suggested that there is no reason to delay implementing a comprehensive control system cyber security program. The commenter explained that the longer implementation is delayed, the longer nuclear power plants will be at risk.

**NRC Response:**

The NRC required through Commission Orders following the September 11, 2001, attacks that licensees take certain actions relative to digital computer and communication systems and networks. Therefore, there is no delay in implementing appropriate cyber security protection measures. This rulemaking establishes the regulatory framework for a cyber security program through which the licensee will provide protection against the DBT for cyber attacks consistent with 10 CFR 73.1 and incorporates lessons learned by the Commission through implementation of Commission Orders.

**Comment Summary:**

Two commenters stated that the proposed wording in 10 CFR 73.55(m)(1) does not allow for other compensating controls to satisfy the need for continued functionality. The commenters suggested that the NRC change the phrase “high assurance that computer systems” to “high assurance that the functionality provided by computer systems.”

**NRC Response:**

The NRC agrees in part. The NRC has revised the final rule to address continued functionality. However, the NRC determined that the requirements must focus on the prevention of adverse effects and the “integrity” of these systems and networks to perform their required functions as *intended*, as opposed to simply maintaining the ability to function. A compromised system or network can still “function” however, that functionality could cause harm as a direct or indirect result of the compromise, and therefore, the basis of these requirements are more appropriately focused on the integrity of these systems and networks to perform the required function as intended.

**Comment Summary:**

Two commenters indicated that the proposed rule language places cyber security within the licensees’ physical security organizations. One commenter explained that cyber security is not currently integrated into the site’s physical security organization. The other commenter suggested that the NRC put proposed 10 CFR 73.55(m) under proposed 10 CFR 73.58 or create a new rule for cyber security.

**NRC Response:**

The NRC's intent is that the cyber security program is incorporated and managed as part of the physical protection program but not necessarily implemented by physical security personnel. The NRC does not intend to dictate what personnel implement the cyber security program and recognizes that a unique technical expertise and knowledge is required to effectively implement the cyber security program as opposed to the physical protection program. As such, the NRC's expectation is that the personnel assigned to each program must be trained, qualified, and equipped to perform their unique duties and responsibilities. However, although the specific measures used may differ, both the physical and cyber security programs involve measures to detect, respond to, and neutralize threats within the design basis threat of radiological sabotage and, therefore, are intrinsically linked and must be integrated to satisfy the physical protection program design criteria of the final rule.

Therefore, the NRC agrees in part. The NRC agrees that the proposed 73.55(m) should be a stand-alone 10 CFR section. The NRC relocated the proposed 73.55(m) in its entirety to a new, stand-alone, 10 CFR section 10 CFR73.54 but retains the requirement that the cyber security program be a component of the physical protection program.

**Comment Summary:**

Another commenter endorsed the detailed NEI comments for this section and stated that he found agreement between NEI-04-04 and the proposed rule. However, the commenter noted that cyber security and its mitigation is not a physical security issue and should be relocated from the Safeguards Contingency Plan (SCP) because some of the detail is more appropriate for guidance documents.

**NRC Response:**

The NRC disagrees. Cyber security, like physical security, focuses on the protection of equipment and systems against attacks by those individuals or organizations that would seek to cause harm, damage, or adversely affect the functions performed by such systems and networks and therefore, must be integrated to satisfy the physical protection program design criteria of the final rule 10 CFR73.55(b).

**Comment Summary:**

Another commenter asked if "protected computer systems" are defined in the proposed rule, or if all computers onsite are affected by the cyber security rules. The commenter urged the NRC to be more specific in defining what a protected computer system is.

**NRC Response:**

The NRC agrees. The NRC has revised the final rule in 73.54(a)(1), to be more specific in defining what a protected computer system is. The term "protected computer systems" is replaced by the term "assets." The term "assets" is used to generically refer to the specific systems and networks that are identified by the licensee through site-specific analysis in 73.54(b)(1) as meeting the criteria in 73.54(a)(1).

**Comment Summary:**

One commenter questioned whether defense-in-depth in computer terms means real-time backup data. The commenter also questioned how this requirement impacts the video capture system, which is a computer system.

**NRC Response:**

The need to back up data, such as recorded video imagines, as part of a defense-in-depth program is dependent upon the nature of the data relative to its use within the facility or system. Defense-in-depth protective strategies are technical and administrative controls that are used to mitigate consequences from a cyber attack. The final rule 73.55(b) requires that the physical protection program be designed to ensure that the capabilities to detect, assess, interdict, and neutralize the DBT are maintained at all times. The licensee determines through a site specific analysis if recorded video imagines must be protected, and the measures needed to maintain these capabilities.

**Comment Summary:**

Two commenters stated that proposed 10 CFR73.55(m)(2) needs clarification. The commenters explained that licensees will assume that the assessment process defined in NEI 04-04, "Cyber Security Program for Power Reactors," will be sufficient to meet the rule requirements. However, the commenters believed NRC needs to include further clarification of what is meant by "assessment" to ensure that NEI 04-04 will meet the requirements. The commenters suggested that the NRC clarify this issue in the Statements of Consideration (SOCs).

**NRC Response:**

The NRC agrees that clarification is needed. The NRC revised the final rule (d)(2) to clarify that the cyber security program design must include a methodology to evaluate and manage cyber risks in a systematic manner in lieu of an independent assessment program. The intent of this requirement is to ensure that the measures used to protect digital computer and communication systems and networks are evaluated and managed in a manner that ensures they remain effective and continue to meet high assurance expectations.

**Comment Summary:**

Another commenter asked if the cyber security assessment program is intended to be real-time, during an initial assessment, or with periodic updates. If NRC wants periodic updates, the commenter asked what periodicity is required.

**NRC Response:**

Consistent with the requirements of the final rule, with regard to assessments and periodic re-assessments, licensees must evaluate changes to the cyber security posture when:

- (1) modifications are proposed for previously assessed systems,
- (2) new technology-related vulnerabilities not previously analyzed in the original baseline are identified and periodic assessments that would act to reduce the cyber security posture of the system are identified.
- (3) there is a change in cyber threat or risk.

**Comment Summary:**

One commenter stated that the NRC should engage independent experts to develop a comprehensive computer vulnerability and cyber-attack threat assessment. The commenter explained that such an assessment must evaluate the vulnerability of the nuclear power plant's computer systems and the potential consequences.

**NRC Response:**

The NRC disagrees that independent experts are needed. It is the licensee's responsibility to

ensure that personnel assigned to evaluate and manage cyber risks are properly trained and possess the knowledge, skills, and abilities required to effectively perform this function. The results of the licensee's evaluation and management of cyber risks is subject to NRC inspection.

**Comment Summary:**

One commenter stated that the proposed language implies that much of the details of the cyber-security program will be classified as SGI. The commenter explained that this will place a large burden on the infrastructure of the cyber-security program. The commenter stated that the current designation of 10 CFR 10 CFR 2.390 should be adequate. The commenter also stated that having cyber security details in the Physical Security Plan (PSP), SCP, or Training and Qualification (T&Q) plan is not appropriate because cyber security is not a regulatory function for nuclear security organizations. The commenter recommended that cyber security requirements be relocated to a separate rule and implementing licensing document. If the NRC does not want to take this step, then the commenter suggested that the NRC clarify the details in the SOCs to state that cyber security program elements are not considered SGI.

**NRC Response:**

The NRC disagrees that approved security plans are by default considered SGI and stresses the fact that designation of any information as SGI is determined in accordance with the criteria set forth in 73.21. The determination of whether cyber security program related information must be protected is determined by the criteria established in 73.21. The NRC disagrees that cyber security is not a regulatory function for nuclear security organizations and has determined that because cyber attacks can adversely impact the ability of the licensee to protect against the design basis threat of radiological sabotage the cyber-security program is an important component of the overall physical protection program.

**Comment Summary:**

Another commenter explained that the summary of the cyber security program now contained in Chapter 18 of NEI 03-12, Revision 4 "Template for Security Plan and Training and Qualification Plan" (endorsed by the NRC) is sufficient to meet the requirement to maintaining a written cyber security plan. The commenter urged the NRC to include this clarification in the SOCs.

**NRC Response:**

The NRC agrees that current security plans address cyber security program requirements. However, the NRC disagrees that the approved plans are applicable to this rulemaking. The NRC has revised the final rule to require that each licensee document its cyber-security program in a stand-alone cyber-security plan in addition to the pre-existing Commission-approved physical security plan, safeguards contingency plan, and training and qualification plan.

**Comment Summary:**

One commenter urged the NRC to clarify that "Continuity of Power Systems" (as defined in NEI 04-04) when it refers to "maximize plant productivity" are outside the scope of this rule. The commenter explained that the NRC should include this clarification in the SOCs.

**NRC Response:**

The NRC agrees in part. The NRC agrees that the continuity of power systems for business systems used to produce electricity are outside the scope of this rulemaking and, as such, the NRC disagrees that topics *not* addressed herein should be identified in the SOCs.

**Comment Summary:**

One commenter stated that there should be a rule requirement prescribing the timeframe in which a licensee must determine that a cyber attack is occurring or has occurred. The commenter suggested that the NRC require licensees to demonstrate a plan of action to detect cyber attacks. The commenter also believed that the NRC should require licensees to change their current emergency call-out and response phone numbers and categorize the numbers as safeguarded data. The commenter suggested that the NRC receive third-party advice whenever a generic cyber-security upgrade is needed, rather than relying on a licensee's judgment. The commenter suggested the National Institute of Standards and Technology Computer Security Division as one advisory source.

**NRC Response:**

The NRC disagrees. This section establishes a performance-based requirement that would require timely detection of, and response to, a cyber security incident. Licensees are required to develop, implement, and maintain a plan of action to detect cyber attacks but are not required to meet deterministic time limits for discovery of a cyber attack. Depending upon the type of attack employed and the skill of the attacker, the results of the attack may not be immediately obvious (as in the case of 0-day attacks) or may require in-depth analysis to discount the possibility of false positives as reported by security monitoring systems. With respect to emergency call-out and response phone numbers, the criterion for determining information as SGI is contained in 10 CFR 73.21. Cyber security upgrades (whether generic or specific) are required to comply with the requirements of this section. The decision to use a third-party advice regarding upgrades resides with the licensee. The NRC agrees that NIST is one source of technical information, but does not dictate what information sources licensees should use.

**Comment Summary:**

One commenter stated that the incident response teams and plans should be tightly integrated with corporate plans. The commenter recommended that these plans remain outside Appendix C and be referenced in the onsite physical protection plan. To achieve this, the commenter recommended that the NRC require the cyber security incident response and recovery plan to be "summarized" and not "described" in the integrated response plan (IRP) required by Appendix C.

**NRC Response:**

The NRC agrees that the cyber security incident response and recovery plan is unique and can be appropriately addressed and maintained separate from the SCP described in Part 73 Appendix C, Section II. Therefore, the NRC has deleted this requirement from the final rule and consistent with the final rule 73.54(e)(2) requires that the incident response and recovery plan be addressed by the stand-alone "cyber security plan".

**Comment Summary:**

Another commenter stated that the cyber security incident response and recover plan does not belong in the Incident Response Plan (IRP) because the IRP outlines off-site law enforcement response to physical security events as defined in the SCP. Also, the commenter explained that if the cyber security response plan is placed in the SCP, much of the IRP would need to be exempt from SGI designation. Otherwise, the commenter stated, a great burden will be placed on the computer systems support organizations. The commenter suggested that the NRC delete this provision from the final rule.

**NRC Response:**

The NRC agrees in part. The NRC has deleted this requirement from the final rule and consistent with the final rule 73.54(e)(2) requires that the incident response and recovery plan be addressed by the stand-alone "cyber security plan".

**Comment Summary:**

Two commenters stated that the "considerations" for 10 CFR 73.55(m)(3)(i) refers to the "computer security program" as opposed to the "cyber security program." The commenters urged the NRC to change "computer security" to "cyber security."

**NRC Response:**

The NRC agrees. The NRC determined that this proposed requirement is sufficiently addressed by the final rule 73.54(f) and is, therefore, not necessary. The NRC has deleted this proposed requirement from the final rule.



## **10 CFR 73.55 Responses to Public Comments**

### **Comment Summary:**

One commenter stated that, in the wake of September 11, 2001, security at nuclear power plants should be increased the same way it is at airports and cargo terminals. The commenter stated that there should be a no fly zone and increased security from the air and water to make every attempt to prevent a terrorist attack.

### **NRC Response:**

Following September 11, 2001, the physical protection programs implemented at nuclear power plants were significantly enhanced through a series of Commission Orders to account for the changing threat environment. This rulemaking reflects those enhancements. With respect to the specific programs required for airports, the requirements applied at power reactors are so significantly different that the two programs can not be equated. The pre-existing 10 CFR 73.55 requires similar search requirements for weapons and explosives that were applied as enhancements to airports after September 11, 2001. The final rule 73.55(e)(8)(ii) addresses water threats. The final rule 10 CFR 50.54(hh) addresses threats from aircraft. The Commission concluded that a requirement for no fly zones is beyond the scope of this rulemaking.

### **Comment Summary:**

Another commenter stated that there are many references to “significant core damage” and “spent fuel sabotage,” but these phrases are sometimes linked by an “and” and sometimes by an “or.” The commenter stated that the two connectors can create very different results. The commenter noted that the two phrases are connected by “and” in 10 CFR 73.55(b)(3), (c)(1)(i), (f)(4), (g)(4)(ii)(C), (i)(4)(i), (k)(1)(i) and by “or” in 10 CFR 73.55(b)(7)(ii) and (t)(1)(ii).

### **NRC Response:**

The Commission agrees and has revised final rule text to use the connector “and” consistently wherever the phrase “significant core damage” and “spent fuel sabotage” is used.

### **Comment Summary:**

The same commenter asked why the final section of proposed 10 CFR 73.55 is merely called “Definitions” and not given a more distinct reference, such as 10 CFR 73.55(u).

### **NRC Response:**

The Commission has determined it is appropriate to define key terms in regulatory guidance and has revised this section accordingly.

### **Comment Summary:**

Another commenter stated that the Power Reactor Security Requirements should fully address the potential consequences of the use of toxic chemicals or chemical weapons as part of an attack scenario. The commenter noted that there are many agents that are not only easy to make and transport, but do not require sophisticated methods to deploy.

### **NRC Response:**

The final rule Appendix B, Section VI, requires that armed response team members be equipped with and trained to use, protective masks for protection against the use of chemical and biological weapons.

**Comment Summary:**

Another commenter stated that the term “unauthorized activities” is ambiguous and is not defined in 10 CFR 73.2. This term is used in the following sections: 10 CFR 73.55(d)(4); (d)(5); (e)(5)(i)(B); (e)(5)(ii); (e)(6)(vi); (e)(8)(vi); (e)(9)(iii); (g)(1)(vi); (h)(5); (h)(7); (i)(4)(i); (i)(6); (i)(8)(iv); (i)(9)(i); (i)(9)(ii); (i)(9)(v); (i)(10)(ii)(B); (l)(4)(iii); (l)(4)(v)(C); and (m)(5).

**NRC Response:**

The Commission agrees in part. The Commission has determined that the word “unauthorized” is retained from the pre-existing 73.55(c)(4). The word “unauthorized” as used in the proposed rule was intended to be generic and site-specific. Nonetheless, the Commission has deleted the term "unauthorized activities" from the final rule.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73.55(d)(1), (e), (g)(1)(i), (g)(2), (g)(3), (h), and (i)(1) appear to impose new requirements to the Owner Controlled Area (OCA) that previously only applied to the protected area (PA) (e.g., barriers, intrusion detection, search, etc.). The commenter argued that results of the NRC Force-on-Force inspections do not support expanding these requirements beyond the PA.

**NRC Response:**

The Commission agrees in part. The NRC has revised the final rule to clarify that physical protection measures applied inside the OCA are determined on a site-by-site basis through site-specific analysis as needed to satisfy the physical protection program design requirements of 10 CFR 73.55(b). The final rule requires that each licensee identify and account for site-specific conditions that necessitate the use of physical barriers in the OCA. The Commission's expectation is that each licensee will implement security measures in the OCA as needed to ensure the physical protection program is effective.

**Comment Summary:**

Regarding proposed 10 CFR 73.55(a)(1), one commenter, supported by another commenter, stated that once the final rule and detailed supporting guidance is published, NEI 03-12 will require revision. The commenter said a significant amount of time is then necessary to review the guidance, prepare the necessary changes to NEI 03-12, and submit NEI 03-12 to NRC for endorsement. Once endorsed, the commenter said the licensee will prepare their individual plan changes and submit them to the NRC for approval. The commenter argued that, given this level of effort, the 180 days does not appear to be workable. The commenter said the rule language must consider the amount of time involved in completing these tasks. The other commenter recommended that the NRC change the effective date to 180 days after NRC's endorsement of the revised NEI 03-12.

**NRC Response:**

The NRC agrees in part. Upon review, the Commission determined that the majority of the amended requirements of this rulemaking are already captured in the current NRC-approved security plans as a result of the October 2006, Commission approval of revised security plans. Consistent with this approval, the Commission further concluded that an additional review and

approval of these pre-existing security plans is not necessary, except as needed to address the new requirements of this section and the new Cyber Security Plan required by the final rule in 10 CFR 73.54. As a result, the Commission has revised the final rule to require licensees to make appropriate plan changes in accordance with 10 CFR 50.54(p), 50.90 and 73.5. Consequently, the Commission determined that 180 days is sufficient time for licensees to identify their site-specific needs and make appropriate changes to the approved plans.

**Comment Summary:**

One commenter asked how much time would be given to licensees to revise their security plans, and whether they must submit the plans under the provisions of 10 CFR 50.90 and 10 CFR 50.54.

**NRC Response:**

As stated above, licensees are given 180 days to identify site-specific needs and to make appropriate changes to the site security plans.

**Comment Summary:**

Another commenter asked whether, under the new rule, the licensees' new plans will be subject to approval by the NRC.

**NRC Response:**

As stated above, the Commission determined that review and approval of the pre-existing security plans is not necessary, except as needed to address the new requirements of this section and the new Cyber Security Plan required by the final rule in 10 CFR 73.54.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73.55(a)(2) would require the security plans to include a description of how the revised requirements will be implemented by the licensee, and a proposed implementation schedule. The commenter said this information is not appropriate to be placed in the security plan. Thus, the commenter recommended that the NRC revise 10 CFR 73.55(a)(2) in the final rule by deleting "and must describe how the revised requirements of this section will be implemented by the licensee, to include a proposed implementation schedule."

Also, the commenter stated that, in accordance with 10 CFR 73.55(a)(1), the security plans must contain the proposed revised requirements, thus the 10 CFR 73.55(a)(2) requirement to include descriptions is redundant. Also, the new security plans will become effective upon NRC approval. Therefore, the commenter stated that the 10 CFR 73.55(a)(2) requirement to include a proposed implementation schedule is not applicable.

**NRC Response:**

The Commission disagrees. It is appropriate for security plans to describe how Commission requirements will be implemented and the final rule, in 10 CFR 73.55(a)(2) and (c)(1)(i) explicitly requires such a description. The required description is necessary to determine the general compliance of each licensee with NRC requirements. The final rule 10 CFR 73.55(a)(2) is revised consistent with the determination that revised plans (in their entirety) are not necessary.

**Comment Summary:**

In reference to proposed 10 CFR 73.55(a)(4), 73.55(c)(1), and 73.55(t)(2), one commenter noted that "the first reference states that licensees will implement the physical protection

program in accordance with Commission regulations, etc., and the second reference appears to support that. However, the second reference acknowledges that alternative measures could be submitted in accordance with 10 CFR 50.4 and 50.90 and, therefore, might be approved by the Commission.” The commenter asked: “What is the legally controlling document, the regulations or the licensees’ NRC-approved physical security plans?”

**NRC Response:**

The Commission concluded that this comment may reflect an over simplification of the NRC regulatory processes. It is more accurate to state that both the NRC’s regulations and the NRC-approved plans are legally controlling, however, the fact that a licensee has an NRC-approved security plan does not relieve the licensee from compliance with NRC regulations. NRC regulations are legally controlling in that they set forth the regulatory framework and general performance objectives and requirements to be implemented by each licensee. The NRC-approved plans describe how the licensee will comply with NRC regulations through implementation, which *includes* any NRC-approved exemptions and alternatives. To the extent that there are differences between the licensee’s security plan and NRC requirements, those differences must be explicitly approved by the NRC, through an NRC-granted exemption (10 CFR 73.5), or an NRC-approved “alternative measure” (final rule 10 CFR 73.55(r)).

The Commission recognizes that generic regulations cannot always account for site-specific conditions and, therefore, has determined that some degree of regulatory flexibility is necessary to ensure that each licensee is able to design their physical protection program to effectively satisfy the "high assurance" performance objective in the final rule (10 CFR 73.55(b)).

Therefore, the final rule is revised to address the mechanisms through which the Commission reviews and approves a licensee’s need for an alternative measure or exemption from one or more NRC requirements provided sufficient justification is demonstrated.

Upon the NRC’s written approval, the measure or measures specified by the NRC in writing, become legally binding as a license condition in lieu of the specific requirement stated in the regulations. It is important to note that the fact that the NRC may have approved a security plan containing a deficiency or conflict, does *not* shield the licensee from regulatory compliance. In such cases the NRC and licensee will work together to resolve the conflict and if needed, changes could be made to the licensee’s security plans to ensure all Commission requirements are met.

**Comment Summary:**

Another commenter stated that in proposed 10 CFR 73.55(a)(4) the word “related” is ambiguous. The commenter stated that proposed 10 CFR 73.55(a)(4) would lead one to believe that compliance with all “site implementing procedures” would be required by the Rule, but there are many site and security procedures not committed to in the security plans. The commenter recommended that the NRC modify this section by deleting “related” and “and site implementing procedures”.

**NRC Response:**

The Commission agrees. The Commission deleted the term "related" in this section of the final rule.

**Comment Summary:**

The terms “significant core damage” and “spent fuel sabotage” should be replaced with the term “radiological sabotage” because “radiological sabotage” is a defined term in 10 CFR 73.2 and

the other terms are not.

**NRC Response:**

The Commission disagrees. The Commission has added 10 CFR 73.55(b)(2) to clarify that the pre-existing requirement in 10 CFR 73.55(a) to “protect against the DBT of radiological sabotage” is retained without modification. “Significant core damage” and “spent fuel sabotage” are design requirements for the physical protection program. As used, the terms “significant core damage” and “spent fuel sabotage” are consistent with the use of these terms prior to and after September 11, 2001. The proposed 73.55(b)(2) has been renumbered in the final rule to 10 CFR 73.55(b)(3).

**Comment Summary:**

The proposed rule language is too detailed, prescriptive, and not performance based. This level of detail is inappropriate for inclusion in rule language. It is appropriate for inclusion in guidance.

**NRC Response:**

The Commission disagrees. Performance-based rules must contain measurable performance-criteria and the Commission has concluded that the capability to protect the public health and safety against the design basis threat of radiological sabotage is directly dependent on the capability to prevent significant core damage and spent fuel sabotage, which is a direct result of the licensee capability to protect target sets.

**Comment Summary:**

The proposed language and statements of consideration do nothing to change the definition of radiological sabotage. If the concern is truly with the definition of radiological sabotage, then it should be revised. It is not clear how the definition of “radiological sabotage” stated in 10 CFR 73.2 contains a performance based element by which the Commission can measure is addressed.

**NRC Response:**

The Commission agrees in part. The Commission agrees that the proposed rule and statements of consideration do nothing to change the definition of radiological sabotage nor does the NRC intend, or believe, that there is a need to revise this definition. As stated in 10 CFR 73.2, radiological sabotage means “Any deliberate act...” and, as such, this definition is excessively broad and can not be measured.

The Commission revised the final rule to clarify that, although the pre-existing requirement for protection against radiological sabotage is retained without modification, the focus of the physical protection program *design* must be on preventing significant core damage and spent fuel sabotage through the protection of target sets against the DBT. As such, the Commission has concluded that significant core damage and spent fuel sabotage is the appropriate performance-criteria against by which the licensee’s capability to protect against radiological sabotage can be measured.

**Comment Summary:**

A literal reading of the rule language is that a physical protection program is not capable of protecting against radiological sabotage unless it has six specific elements. All six elements are not required to protect against acts of radiological sabotage.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to use the term "interdict" in lieu of the three terms "intercept, challenge, and delay." The Commission concluded that the term interdict more concisely represents Commission expectations. The Commission agrees that a physical protection program is not effective unless it has all four elements and disagrees that all four elements are not required to protect against radiological sabotage. To be effective a physical protection program must possess and maintain the ability to detect the presence of a threat, assess the threat capabilities to determine appropriate response, interdict a response between the threat and the protected items before the threat reaches its objective or target, and neutralize the capability of the threat to cause harm or otherwise complete its objective.

Therefore, a physical protection program is not capable of protecting against radiological sabotage unless it meets these four (4) performance-criteria. A failure of any one element could result in a failure of the program to protect the public health and safety against radiological sabotage.

**Comment Summary:**

The proposed language and discussion in the statement of considerations is confusing and inconsistent. The statement of considerations references the existing regulatory requirement which is delineated in 10 CFR 73.55(a) and notes it is being revised to provide a more detailed and performance based requirement for the design of the physical protection program. However, the statement of considerations also cites the existing 10 CFR73.55(h)(4)(iii)(A) as the section with language that is problematic. So, which of the existing regulations are intended to be modified?

**NRC Response:**

This requirement is not intended to modify either current requirement but rather, retains and combines the current requirements of 10 CFR73.55(a) to protect against the Design Basis Threat (DBT), and 10 CFR73.55(h)(4)(iii)(A) to interpose. The Commission's intent is to clarify that both requirements are directly related and address critical physical protection program design features. To protect against and interpose the DBT, the licensee must detect and assess the threat and then interdict and neutralize that threat. Therefore, the four terms detect, assess, interdict, and neutralize are appropriate performance-criteria to be met.

**Comment Summary:**

10 CFR 73.55(h)(4)(iii)(A) is modified later in the proposed rule in section 73.55 (K)(7)(iii). The language in that section cites four of the six criteria delineated in (b)(2) yet those six criteria are intended to address the concern with the word "interpose" which only appears in 10 CFR73.55(h)(4)(iii)(A). The linkage between the language in 10 CFR73.55(h)(4)(iii)(A) and in (b)(2) not clear and should be explained and justified.

**NRC Response:**

The revised 73.55(k)(7)(iii) focuses on the action "interpose", which is represented in the final rule text as "interdict and neutralize". Because 73.55(k)(7)(iii) focuses only on the action "interpose", the two design features "detect and assess" are not addressed as these two actions would have already been completed in order to reach the action "interpose".

**Comment Summary:**

Further, these six elements do not apply to all threat conditions. For example, defense against

a large vehicle bomb is not likely to require all six capabilities.

**NRC Response:**

The Commission agrees. The fact that any one of the six performance-criteria (revised to four) does not apply to any one scenario does not invalidate its applicability. The Commission agrees that not all four performance-criteria apply equally in all possible scenarios. However, any one scenario will always contain at least one or more of the four performance-criteria and, therefore, each one is a valid design requirement by itself.

For example, the function of a Vehicle Barrier can interdict and/or neutralize a vehicle bomb without detection and assessment. However, it is the Commission's expectation that the physical protection program is not limited to only protection against vehicle bombs but also includes all other threats up to the full DBT to include a ground assault, and therefore, the detect and assess performance-criteria as well as the interdict and neutralize performance-criteria apply to scenarios involving the DBT adversary force.

**Comment Summary:**

In a performance based environment, performance assessments properly focus on outcomes not the underlying processes.

**NRC Response:**

The Commission agrees that a performance-based rule must focus on “outcomes” and the Commission's expectation is that the licensee's physical protection program design will focus on the elements needed to detect, assess, interdict, and neutralize the DBT before significant core damage and spent fuel sabotage is completed and, therefore, provide the outcome of high assurance that the public health and safety is protected against radiological sabotage.

**Comment Summary:**

The language in the rule is not consistent with the order language in regards to “single act” and appears to expand the requirement beyond what was required by the order (reference Section 3 of the April 29, 2003 DBT Order). The commenter recommended that 10 CFR 73.55(b)(3) be revised as follows: (b)(3) The licensee physical protection program must be designed and implemented to satisfy the requirements of this section and ensure that no single act, as bounded by the design basis threat, can ~~disable the personnel, equipment, or systems necessary to prevent significant core damage and spent fuel sabotage~~ result in radiological sabotage. The terms “significant core damage” and “spent fuel sabotage” should be replaced with the term “radiological sabotage” because “radiological sabotage” is a defined term in 10 CFR 73.2 and the other terms are not. The rule should include a definition of “no single act.”

**NRC Response:**

The Commission agrees in part. The Commission agrees that the proposed requirement intended to expand the pre-existing requirement for protection against a single act, and disagrees that the proposed requirement was not consistent with Commission Orders. Nonetheless, the Commission concluded that the term "single act" is specific to the Central Alarm Station/Secondary Alarm Station (CAS/SAS) survivability and functionality, and that protection of personnel, systems, and equipment is specific to protection against the vehicle bomb attributed to the DBT. This requirement intended to consolidate the protection of personnel, equipment, and systems against a vehicle bomb with the pre-existing requirement for protection of CAS/SAS against a single act into one performance-based requirement.

Upon review the Commission concluded that it is more appropriate to address each requirement individually and has revised the final rule 10 CFR 73.55(i)(4)(i) to address “single act” and the final rule 10 CFR 73.55(e)(10)(i)(A) to address protection of personnel, systems, and equipment. The Commission’s expectation is that each licensee will ensure survivability of either CAS or SAS against a single act within the DBT capabilities and will protect personnel, systems, and equipment required to maintain safe shutdown capability, and implement the protective strategy, against a vehicle bomb.

**Comment Summary:**

The scope of the statement in 10 CFR 73.55(b)(4) is far reaching and ambiguous. As written, this requirement appears to impose more stringent design criteria than for safety-related systems. The language used in (b)(4) does not match the SOC discussion. The focus of the SOC is on defense in depth which is currently described in NEI 03-12. At the March 9, public meeting (see Page 23 of the meeting transcript) the NRC clarified that the intent of this new requirement was not to produce a completely diverse and redundant system for every attribute of the site security plan. Given the clarification on this provision the commenter recommended revising 10 CFR 73.55(b)(4) as follows: “(b)(4) The physical protection program must include defense in depth. ~~diverse and redundant equipment, systems, technology, programs, supporting processes, and implementing procedures.~~”

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to use the phrase "defense-in-depth". The proposed rule and the SOCs attempted to describe defense-in-depth with performance-based language consistent with how this long-standing and professionally accepted standard is applied. Defense-in-depth begins with security measures in the OCA (least stringent) and includes progressively more stringent measures through the Protected Area (PA) to Vital Areas (VAs). Defense-in-depth ensures that the failure or bypass of any one component of the physical protection program does not cause a failure of the entire program. In the case of equipment failure, compensatory measures are commonly used to ensure that the function performed by the failed equipment is maintained and could involve back-up equipment or personnel.

**Comment Summary:**

A commenter recommended deleting 10 CFR 73.55 because he believed that it is redundant to the requirements specified in Appendix B and C to this part. If retained, the commenter recommended that it be revised as follows: “(b)(6) The licensee shall establish and maintain a ~~written~~ performance evaluation program in accordance with appendix B and appendix C to this part, to demonstrate and assess the effectiveness of armed responders and armed security officers to perform their assigned duties and responsibilities to protect target sets described in paragraph (f) of this section and appendix C to this part, through implementation of the licensee protective strategy.”

**NRC Response:**

The Commission agrees in part. This requirement is necessary to establish the regulatory framework for the requirements in Appendix B. The Commission agrees that the performance evaluation program need not be a completely independent written program and has revised the final rule to require that this program be documented to provide flexibility and allow the licensee to utilize existing documentation to represent this program.



**Comment Summary:**

In 10 CFR 73.55(b)(8), replace the word “Measures” with the words “The program”. It is the corrective action program that must ensure necessary and appropriate actions are initiated.

**NRC Response:**

The Commission agrees. The Commission has revised final rule text to incorporate the requested change and other clarifying revisions.

**Comment Summary:**

A commenter stated that the Commission should change the broad definition of “Security plans” to embrace all the plans that are included in it (i.e., “physical security plan,” “training and qualification plan,” and “safeguards contingency plan”). The commenter stated that a possible solution is to simply name the section “Plans”.

**NRC Response:**

The Commission agrees in part. Consistent with the 10 CFR 73.55(a) introduction, the four plan titles are consolidated under the generic title “security plans”. The Commission has determined that the term “security” is commonly understood by both industry and the public to be the focus of these plans and is needed to prevent confusion with other site plans.

**Comment Summary:**

One commenter stated that it is logical that power plants situated near highly populated metropolitan areas are more likely to be selected as targets, so the PRSRs should be modified to require a customized approach to security at high target nuclear facilities.

**NRC Response:**

The Commission agrees in part. The Commission agrees that a customized approach to security is necessary at all sites. The Commission requires in 10 CFR 73.55(b)(4) that licensees analyze their site-specific conditions in the design of the physical protection program.

**Comment Summary:**

Another commenter noted that proposed 10 CFR 73.55(c)(3)(ii) may imply that the details of a cyber-security plan will be classified as Safeguards Information (SGI). The commenter stated that this would greatly extend the timeframe and complicates the implementation of a cyber-security program. The commenter recommended that the Commission clarify the SOCs to state that some elements of the physical security plan (PSP) may not be SGI even though the PSP itself is controlled as SGI (e.g., cyber security requirements).

**NRC Response:**

Compliance with this provision requires that each licensee review each security plan in accordance with the criteria established in 10 CFR 73.21 and portion mark the security plans appropriately.

**Comment Summary:**

A commenter stated that proposed 10 CFR 73.55(c)(2) is redundant to the requirements in 10 CFR 50.34(e) and 73.21. As such, and since 10 CFR 73.55 licensees must comply with 10 CFR 50.34(e) and 73.21, the commenter argued that this redundant rule is unnecessary. In addition, the commenter noted that the reference to 10 CFR 73.21 will soon need to be change to 10 CFR 73.22 and 10 CFR 73.23 upon issuance of the proposed SGI rules. The commenter stated that proposed 10 CFR 73.22 and 10 CFR 73.23 basically state the same as the current

10 CFR 73.21 with some wording changes. Thus, the commenter recommended that the Commission delete 10 CFR 73.55(c)(2) from the final rule, as it is redundant to the current 10 CFR 50.34(e) and 73.21 and serves no purpose.

**NRC Response:**

The Commission disagrees. This requirement is necessary to clearly identify handling and protection requirements for security plans in this regulatory framework. In addition, the Commission disagrees that reference to 10 CFR 73.21 will necessitate future changes to this rule text. The Commission understands that 10 CFR 73.22 and 73.23 may be added, but that 10 CFR 73.21 will remain as the primary regulatory text through which 10 CFR 73.22 and 73.23 will be linked, and therefore, reference to 10 CFR 73.21 in this rule text establishes the necessary regulatory link to all three.

**Comment Summary:**

One commenter noted that proposed 10 CFR 73.55(c)(3)(i) is redundant with 10 CFR 50.34(c) and each licensee's License Conditions. Thus, the commenter recommended that the Commission delete this section from the final rule.

**NRC Response:**

The Commission disagrees. The Commission has determined that this requirement is necessary to establish the regulatory framework for the physical security plan in this section.

**Comment Summary:**

One commenter stated that the Commission should incorporate the proposed rule wording in the new 10 CFR 73.55(c)(4)(ii) into 10 CFR 50.34 to be consistent with existing 10 CFR 50.34(c) and (d). The commenter also recommended that the Commission delete proposed 10 CFR 73.55(c)(4)(ii) and integrate it into a new 10 CFR 50.34 (e) to be consistent with 10 CFR 50.34(c) and (d).

**NRC Response:**

The Commission agrees in part. The current requirement for a Training and Qualification Plan is found in 10 CFR 73.55(b)(4)(ii) and not 10 CFR 50.34. The Commission has made conforming changes to 50.34(c) to require both the cyber security plan and the training and qualification plan as part of the physical security plan. The Commission retains this requirement in the final rule to consolidate and describe the requirements for all four required plans in one 10 CFR location.

**Comment Summary:**

The same commenter stated that proposed 10 CFR 73.55(c)(4)(ii) could be interpreted as requiring all members of the security organization to have training requirements equivalent to those for the uniformed security organization. Thus, the commenter recommended that the Commission revise 10 CFR 73.55(c)(4)(ii) in the final rule to state: "The training and qualification plan must describe the process by which armed and unarmed security personnel, *and* watchpersons will be selected, trained, equipped, tested, qualified, and re-qualified to ensure that these individuals possess and maintain the knowledge, skills, and abilities required to carry out their assigned *security duties effectively in accordance with appendix B, General Criteria for Security Personnel.*"

**NRC Response:**

The Commission agrees in part. This requirement has been determined to be redundant to the

final rule Appendix B, Section VI, and is deleted from this section. The Commission agrees that administrative staff such as secretaries, file clerks, and cyber security staff would not require Appendix B type training equal to uniformed personnel, however, the Commission does intend to require task-specific training of facility personnel, uniformed or not, who are assigned duties and responsibilities associated with implementation of the physical protection program. Specifically, the Commission intends to include facility personnel performing duties such as, vehicle escorts, searches, and/or compensatory measures for failed security equipment or systems.

**Comment Summary:**

One commenter stated that the proposed rule wording in 10 CFR 73.55(c)(5)(i) is redundant to the requirements specified in 10 CFR 50.34(d) and each licensee's License Condition. The commenter recommended that the Commission delete this provision as it is redundant to existing 10 CFR part 50 rule requirements and license conditions for nuclear facilities.

**NRC Response:**

The Commission disagrees. The Commission has determined that this requirement is necessary to establish the regulatory framework for the safeguards contingency plan in this section.

**Comment Summary:**

One commenter noted that draft final Part 52 rule includes requirements for design certification applicants to include a description and evaluation of the design features or strategies for the prevention and mitigation of a specific set of severe accidents. The commenter acknowledged that action should be taken to prevent or mitigate certain specific beyond design bases events including those resulting from large fires and explosions. To improve regulatory coherency and consistency, the commenter stated that the Commission should address large fires and explosions in the same regulation and in the same manner as other similar beyond design bases events that are already being addressed in the regulations. The commenter noted that the evaluations of the features and strategies that could mitigate or prevent beyond design bases accidents that result from large fires and explosions are performed by engineering and operational groups and NRC reviews are performed by engineering and operations inspectors. Therefore, the commenter stated that it is more appropriate for these matters to be addressed in Part 52 as opposed to Part 73.

**NRC Response:**

The Commission agrees. The Commission has determined that this comment more accurately addresses the proposed requirements in Appendix C, Section II., paragraphs (j) and (k)(1). The NRC has revised final rule text to move these requirements from the proposed Appendix C to a new 10 CFR 50.54(hh) because the specific requirements associated with this topic are currently implemented through "license conditions".

**Comment Summary:**

One commenter stated that the proposed language is too detailed, prescriptive, and not performance-based. The commenter argued that this level of detail is inappropriate for inclusion in rule language, but is appropriate for inclusion in guidance. The commenter suggested that the rule language be modified to state that "the safeguards contingency plan must describe predetermined actions, plans, and strategies designed to protect against threats up to and including the design basis threat of radiological sabotage."

**NRC Response:**

The NRC agrees in part. The NRC has revised final rule text in 10 CFR 73.55(c)(5) to generically address the contents of the Contingency Plan and has deleted this requirement because it is redundant to the specific requirements in Appendix C, Section II.

**Comment Summary:**

Another commenter noted that proposed 10 CFR 73.55(c)(5)(ii) specifies that the safeguards contingency plan (SCP) “must describe predetermined actions” for threats “up to and including the design basis threat of radiological sabotage.” The commenter stated that this language is problematic because there is no cutoff in planning for minor events that do not pose a threat of radiological sabotage. The commenter argued that there is no need for the rule to be open-ended regarding the scope of contingency planning, and predetermined actions for lesser events can adequately be addressed in the NRC endorsed industry template for the SCP. Therefore, the commenter suggested that the Commission delete the phrase “threats up to and including” so that the section reads “The safeguards contingency plan must describe predetermined actions, plans, and strategies designed to intercept, challenge, delay, and neutralize the design basis threat of radiological sabotage.”

**NRC Response:**

The Commission disagrees. The Commission has determined that the pre-existing scope for contingency planning and predetermined actions includes threats that do not constitute the full DBT, such as a civil disturbance. The Commission disagrees that there is no need for the rule to include such lesser events because such lesser events have the potential to escalate and therefore, must also be reconciled. The Commission has determined that the phrase “up to and including” is appropriate and necessary to clearly identify that the licensee must protect against all the capabilities of the DBT.

**Comment Summary:**

Another commenter stated that industry understands that the summary of the cyber security program now contained in Chapter 18 of NEI 03-12, Revision 4 “Template for Security Plan and Training and Qualification Plan” is sufficient to meet the proposed 10 CFR 73.55(c)(3)(i) requirement. The commenter noted that NEI 03-12 Revision 4 has been endorsed by the NRC, and this clarification should be provided in the SOC.

**NRC Response:**

The Commission disagrees. While the NRC has endorsed certain documents currently used by industry, the requirements for the cyber security program at power reactors are contained in the new 10 CFR 73.54. Acceptable methods of meeting these requirements are provided in draft regulatory guidance. The purpose of the SOC for this rulemaking is to provide clarifying information relative to Commission intent and expectations for these requirements and is not intended to provide endorsement of industry documentation.

**Comment Summary:**

One commenter stated that to incorporate the level of detail delineated (i.e., specific actions) will require an extensive re-write of existing site procedures. The commenter argued that many of the decisions and most of the actions cannot be forethought and cannot be documented in implementing procedures. Further, the commenter noted that the specificity of the requirement prevents the licensee from being able to provide the necessary flexibility to each member of the security organization to respond to the infinite spectrum of threats. Therefore, the commenter suggested that the NRC delete the word “specific” from 10 CFR 73.55(c)(6)(iii).

**NRC Response:**

The Commission agrees. Upon review, the Commission has determined that the use of the term “specific” is too extensive and not appropriate. Implementing procedures, by their very nature, must account for site-specific conditions and are subject to change. As such, implementing procedures must generally describe how each individual should respond in certain situations and conditions consistent with the effective implementation of Commission requirements. Therefore, the Commission has revised the final rule by replacing the word “specific” with the phrase “types of” to avoid unnecessary regulatory burden.

**Comment Summary:**

One commenter noted that the proposed rule language for 10 CFR 73.55(c)(6)(iv)(C) is noted in the SOCs as being new, but the impacts are not evaluated in the Regulatory Analysis. The commenter stated that the security organization is not equipped to review all site procedures every time a security procedure is modified. The commenter argued that implementation of this proposed requirement, as written, will have a significant impact on the organization and require additional security resources with the appropriate knowledge of all site procedures.

The commenter noted that at the March 9, 2007, public meeting the NRC clarified the intent of this section as applying to only security procedures and it is not the intent of this section to get into operational areas. Given this clarification, the commenter recommended that the Commission delete this provision from the proposed rule, as it is redundant to proposed 10 CFR 73.58. If retained, the commenter recommended the following revision to the provision: “Ensure that changes made to security implementing procedures do not decrease the effectiveness of any procedure to implement and satisfy Commission security requirements”.

**NRC Response:**

The Commission agrees in part. The Commission disagrees that the proposed rule SOCs identify this requirement as new. The proposed SOCs state that this requirement is added to update and clarify the current regulatory framework. The current 10 CFR 73.55(b)(1)(i) requires licensees to comply with NRC requirements and the approved security plans, and 10 CFR 73.55(b)(3) requires a management system for controlling security procedures. As procedures implement security plans and plans implement requirements, the licensee must ensure that changes to procedures do not conflict with NRC requirements. The Commission agrees that the review of non-security procedures would have significant unintended impact and has revised the final rule to clarify that this requirement is limited to physical protection program implementing procedures. Given this clarification, the Commission disagrees that this requirement is redundant to 10 CFR 73.58 and has retained it.

**Comment Summary:**

Similarly, another commenter stated that proposed 10 CFR 73.55(c)(6)(iv)(C) is vague, open-ended, and appears to require all site “implementing procedures” to be reviewed to detect any decrease in effectiveness in satisfying any Commission requirement. The commenter suggested that this provision should be reworded to be consistent with the Commission approved SCP requirements. Therefore, the commenter suggested that the NRC modify the provision to be consistent with SCP, Section 3.3, as follows: “Ensure that changes made to facility implementing procedures required to effectively implement the site’s protective strategy do not decrease the physical security effectiveness.”

**NRC Response:**

The Commission agrees in part. The Commission agrees that the review of non-security

procedures would have significant unintended impact and has revised the final rule to clarify that this requirement is limited to physical protection program implementing procedures. Given this clarification, the Commission disagrees with the suggested rule text change.

**Comment Summary:**

A third commenter stated that 10 CFR 73.55(c)(6)(iv)(C) imposes on licensee procedures the same requirement that is currently only imposed on approved security plans. While the commenter admits that this is wise, the requirement imposes a similar standard for something that is not NRC-approved as that which is required for something that is NRC-approved.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to clarify that this requirement is limited to physical protection program implementing procedures. This proposed requirement used similar language as that of 10 CFR 50.54(p) to clarify the pre-existing 10 CFR 73.55(b)(1)(i) and 73.55(b)(3). Upon review, the Commission has also revised the final rule to clarify that changes must be reviewed to ensure continued compliance with NRC requirements rather than a subjective "decrease" of effectiveness.

**Comment Summary:**

In 10 CFR 73.55(d)(1), one commenter stated that the terms "early detection" and "unauthorized activities" are not defined and can have many different connotations resulting in significant impact on current programs. Also, the commenter stated that this provision does not match up with the performance criteria from proposed 10 CFR 73.55(b). The commenter noted that the term "any area" is nonspecific and can be interpreted broadly and that licensees only need monitor those areas necessary to successfully implement the physical protection program.

Therefore, the commenter recommended that the Commission eliminate the qualifiers "early," "unauthorized activities," and "any area" from the provision and reword it to state: "The licensee shall establish and maintain a security organization designed, staffed, trained, and equipped to provide detection, assessment, and response to protect the facility against radiological sabotage.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to clarify design requirements for the licensee security organization. The focus of this requirement is on an effective physical protection program that has the capability to detect, assess, interdict, and neutralize the design basis threat of radiological sabotage relative to preventing significant core damage and spent fuel sabotage. The Commission expectation is that the licensee will provide appropriate protective measures in any facility area for which site-specific analysis has determined that protective measures are needed. The licensee determines, subject to NRC inspection, the areas for which physical protection measures are needed consistent with its protective strategy.

**Comment Summary:**

A third commenter stated that the proposed phrase "within any area of the facility" in 10 CFR 73.55(d)(1) could be interpreted to include the OCA, PA, and VA, which would have the potential to drive early detection, assessment, and response beyond the area currently covered. The commenter noted that the SOCs describe the identification of a threat before an attempt to penetrate the PA. This is consistent throughout the proposed rule and drives each site to

protect an area that was previously viewed only as a licensee-owned “buffer zone.”

The commenter argued that the expectation to detect, assess, and respond for any area of the facility is unnecessary to demonstrate an effective defensive strategy and cannot be implemented due to the layout and geography at many sites. Therefore, the commenter suggested that the Commission should delete this new requirement and reword proposed 10 CFR 73.55(d)(1) as follows: “The licensee shall establish and maintain a security organization designed, staffed, trained, and equipped to provide detection, assessment, and/or response to unauthorized activities within the facility owner-controlled area as described in the Commission-approved security plans”.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to clarify design requirements for the licensee security organization. The focus of this requirement is on an effective physical protection program that has the capability to detect, assess, interdict, and neutralize the design basis threat of radiological sabotage relative to preventing significant core damage and spent fuel sabotage. The Commission expectation is that the licensee will provide appropriate protective measures in any facility area for which site-specific analysis has determined that protective measures are needed. The licensee determines, subject to NRC inspection, the areas for which physical protection measures are needed consistent with its protective strategy..

**Comment Summary:**

Another commenter stated that requiring the licensee to detect, assess, and respond to unauthorized activities in “any area of the facility” is too broad and goes beyond the legislative intent of the Atomic Energy Act by requiring the licensee to protect even the non-radiological areas of the plant. The commenter explained that “any area” of the plant could include training facilities, administration buildings, and equipment sheds, for which “unauthorized activities” would be quite different from those within the operational areas of the plant itself.

**NRC Response:**

The Commission disagrees that such areas are beyond the legislative intent of the Atomic Energy Act. The Commission has determined that the physical protection program must provide protection against the DBT in any facility area provided the DBT could disable the personnel, systems, or equipment required to prevent significant core damage and spent fuel sabotage from that area. The licensee determines, subject to NRC inspection, the areas for which physical protection measures are needed consistent with its protective strategy.

**Comment Summary:**

Another commenter stated that if there was ever a major incident at a nuclear power reactor, the license should not be renewed. The commenter clarified that if the license is renewed, there should be a requirement for increased safety staffing and procedures to make every effort to avoid an accident.

**NRC Response:**

The NRC has determined that this comment is not within the scope of this rulemaking.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(d)(3) could be interpreted as requiring training and

qualification (T&Q) training for any “member of the security organization.” Therefore, the commenter suggested that the Commission replace the phrase “member of the security organization” with the phrase “an armed responder, armed security officer, alarm station operator, or watchperson”.

**NRC Response:**

The Commission disagrees. The Commission intends to include unarmed individuals, and non-security organization facility personnel, who perform security program duties and responsibilities such as escort duties, compensatory measures, and search functions. The Commission has revised the final rule to clarify that all personnel implementing the physical security program must be trained and qualified to the level of training and qualifications necessary to effectively perform their specific duties.

**Comment Summary:**

Two commenters referenced proposed 10 CFR 73.55(d)(5)(ii). One commenter asked: What is the difference between this provision and 10 CFR 73.55(r)(1)? If they are the same, the commenter suggested that the NRC delete one of the requirements to avoid confusion over purpose and scope.

**NRC Response:**

The Commission agrees. The Commission has deleted this paragraph but retains this requirement in 10 CFR 73.55(q)(1) "Records". This requirement focused on conditions to be specified in a written contract for security force services.

**Comment Summary:**

The other commenter recommended that the Commission delete the words “copies of” from 10 CFR 73.55(d)(5)(ii), as the commenter did not believe it is necessary for the NRC to have original versions of reports.

**NRC Response:**

The Commission disagrees. The NRC has the authority and obligation to retain original copies of any and all documents or records that are required by NRC regulations, whenever the NRC determines that such action is necessary. The Commission has deleted this paragraph but retains this requirement in 10 CFR 73.55(q)(1) “Records”.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(e) will require licensees to make significant physical security changes in the OCA.

**NRC Response:**

The Commission disagrees. The final rule 10 CFR 73.55(b)(4) is revised to clarify the intended scope of this requirement. Each licensee is required to perform a site-specific analysis to determine what measures are needed in the OCA to account for “site” specific conditions relative to the use of physical barriers. The Commission concluded that site-specific conditions directly affect the use, type, function, construction, and placement of physical barriers and therefore, site-specific conditions must be accounted for in the design of the physical protection program.

**Comment Summary:**



Another commenter noted that proposed 10 CFR 73.55(e) and (e)(3)(iii) require that barriers be “designed and constructed...to deter, delay, and prevent the introduction of unauthorized personnel, vehicles, or materials into areas for which access must be controlled or restricted.” The commenter asked: “Since the requirement refers to design, if the NRC approves the plan yet the barrier later fails, can the licensee still conclude that NRC’s approval acknowledged that the barrier was, in fact, designed properly?”

**NRC Response:**

The NRC-approved security plans describe how each licensee will implement NRC requirements at its site. It is the responsibility of each licensee to analyze the site-specific conditions, determine what physical barriers are needed to account for these conditions, and to design and construct physical barriers as needed to perform the intended function to support the physical security program. Construction criteria are site-specific and must be adequate to perform the intended function.

**Comment Summary:**

Several commenters stated that the Commission should require physical barriers against air attack. One commenter argued that it is unacceptable to exempt air attacks from the kinds of threats reactors must be capable of defending against. The commenter supported either “Beamhenge” shields to prevent planes from crashing into reactor facilities or ground-based air defense systems.

**NRC Response:**

The Commission has determined that this comment is outside the scope of this section. The final rule 10 CFR 50.54(hh) is added to address threats from aircraft.

**Comment Summary:**

Another commenter argued that to allow generation of radioactive waste for another twenty years without a permanent storage site picked or the requirement of hardening the waste in a dry cask on site is wrong. The commenter stated that license extensions, if allowed, should be with a condition of hardening the current and future waste.

**NRC Response:**

The Commission has determined that this comment is outside the scope of this rulemaking.

**Comment Summary:**

A third commenter stated that recent events have made air attack a continuing issue in the consideration of nuclear plant security. The commenter said that the lack of any provision for security against aerial attack in the proposed rule confirms that the Commission has not asked and is not asking nuclear power plant owners to do anything to resist such attacks. The commenter argued that, apart from this favoritism toward corporate owners, the omission of such defensive measures reflects a profound abdication of responsibility by the NRC itself. The commenter stated that the NRC is aware that in the past seven years al-Qaeda and other terrorist groups have employed plane, missile, and mortar attacks around the world, so not requiring common-sense defensive measures against such attacks reflects either complacency or blindness towards such demonstrated threats.

The commenter stated that the NRC's shortsightedness is also evidenced by its exclusive focus on active defense against attacks involving large commercial aircraft, by its disregard for the

value of preventing damage to a nuclear power plant, and by its dismissal of physical barriers, which provide a passive defense against aerial attack. The commenter said that ignoring general aviation has led the Commission to overlook the potential for using passive physical barriers to protect nuclear power plants from attacks by smaller aircraft and other aerial threats.

The commenter said such passive barriers [e.g., appropriately-located grids of vertical and horizontal “I” beams, steel cables, steel mesh curtains, cooling towers, barrage balloons] would reduce or eliminate the “approach avenues” that could be used by larger planes or jets controlled by terrorists.

The commenter also noted that the Commission observed that “active protection against the airborne threat rests with other organizations of the federal government.” The commenter said the Commission’s observation about other federal agency responsibility for active defense of nuclear power plants against aerial attack is not responsive to a proposal for a physical barrier. The commenter said that, given that the Commission will require physical barriers against water-borne attacks, it similarly should require physical barriers against air attacks.

The commenter noted that there is some risk that an air attack on a nuclear power plant could cause a radiation release that harms people, and a larger risk of a release that could cause enormous economic damage. The commenter concluded that at least some of the risk of air attack can be reduced with physical barriers, and given the potential value of physical barriers against air attack, the Commission should require nuclear power plant owners to install such barriers. The commenter said if this modification requires setting aside or revising the NRC decision on the DBT regulations, then the Commission should do so.

**NRC Response:**

The Commission added 10 CFR 50.54(hh) to address threats from aircraft.

**Comment Summary:**

Another commenter said the security requirements must be upgraded to include high-speed attack by a jumbo jet of the maximum size anticipated to be in commercial use, as well as unexpected attack by general aviation aircraft and helicopters. The commenter noted that the requirements must contemplate all such aircraft to be fully loaded, fueled and armed with explosives.

Further, the commenter stated that it is essential that the security requirements take into consideration the cascading consequences of aerial assault on the full spectrum of plant installation and address not only the direct effect of impact, but the full potential after-effects of (A) induced vibrations; (B) dislodged debris falling onto sensitive equipment; (C) a fuel fire; and (D) the combustion of aerosolized fuel (especially in combination with pre-existing on-site gases such as hydrogen).

The commenter concluded that hardening a nuclear power plant against aerial threat will necessitate significant upgrades in plant fortification. However, the commenter noted that even relatively modest measures such as the installation of Beamhenge and the placement of all sufficiently cooled spent fuel into Hardened On-Site Storage Systems would add measurable protection.

**NRC Response:**

The Commission added 10 CFR 50.54(hh) to address threats from aircraft.

**Comment Summary:**

One commenter stated that the Commission should require spent fuel pools to revert to low density fuel assembly storage. The commenter stated that licensees should place the remaining assemblies in hardened, dispersed dry cask storage until all assemblies are moved off site.

**NRC Response:**

The Commission has determined that this comment is outside the scope of this rulemaking.

**Comment Summary:**

Similarly, another commenter expressed concern that the proposed rule gives no indication that the Commission has taken the most important and effective step necessary to reduce the effectiveness of sabotage against spent-fuel pools, which would be to require licensees to change the configuration of spent-fuel pools from high-density storage to low-density storage using open-frame racks. The commenter argued that the use of low-density storage in spent-fuel pools would dramatically reduce the likelihood that an act of sabotage would cause a fire in a spent-fuel storage pool.

**NRC Response:**

The Commission has determined that this comment is outside the scope of this rulemaking.

**Comment Summary:**

Several commenters recommended that the Commission add a physical barrier requirement specific to spent fuel pools.

**NRC Response:**

The physical barriers discussed in this paragraph are generic to the effectiveness of the physical protection program. Specific physical barrier requirements are determined through the analysis of site-specific conditions and NRC requirements. In 10 CFR 73.55(e)(7)(v)(B) the Commission specifically requires that the spent fuel pool be protected as a vital area.

**Comment Summary:**

One commenter stated that spent fuel pools are of particular concern because the disposition of water could uncover the fuel. The commenter stated that if plant workers are unable to effectuate replacement of the water (either because of fire or because they are otherwise incapacitated), experts warn, an exothermic reaction could cause the zirconium clad spent fuel rods to ignite a nuclear waste conflagration that would very likely spew the entire radioactive contents of the spent fuel pool into the atmosphere.

**NRC Response:**

In 10 CFR 73.55(b)(3) the Commission requires that the physical protection program be designed to prevent significant core damage and spent fuel sabotage. In 10 CFR 73.55(e)(7)(v)(B) the Commission requires that the spent fuel pool be protected as a vital area.

**Comment Summary:**

A commenter stated that 10 CFR 73.55(e)(1) would require the approved security plans to describe the design, construction and function of physical barriers, including verification that the functional objectives were achieved. The commenter noted that the design, construction, and

function of physical barriers are already described in configuration control documents, such as calculations, drawings, and design basis documents. The commenter argued that it is unnecessary to duplicate information in the PSP that was removed to the references by the PSP format used for DBT. The commenter suggested that Commission delete this requirement and that the information should be retained in the configuration control documents.

Therefore, the commenter recommended that the NRC reword the proposed 10 CFR 73.55(e)(1) to state: "The licensee shall describe in the approved security plans the physical barriers and barrier system functions required to support the licensee's protective strategy".

**NRC Response:**

The Commission agrees. See also 10 CFR 73.55(e)(2) The Commission has revised the final rule to clarify the scope of this requirement. The Commission concluded that the required description can be satisfied through reference to existing documentation and need not be duplicated in the security plans. This description is subject to the records retention requirements in 10 CFR 73.55(r).

**Comment Summary:**

One commenter stated that the proposed language is too broad in that it requires all records be retained as safeguards rather than maintaining only those records that meet the definition for being safeguards in accordance with 10 CFR 73.21. The commenter recommended that the NRC replace the phrase "as safeguards" with "that are safeguards".

**NRC Response:**

The Commission agrees. The Commission has revised final rule text to clarify that this information must be reviewed against the provisions of 10 CFR 73.21 and designated as SGI only where appropriate.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(e)(2) would require licensees to protect, as SGI, all physical barrier "analyses, comparisons, and descriptions," which is redundant to the current requirements in 10 CFR 73.21. The commenter noted that, as indicated on page 62695 of the Federal Register notice, this proposed rule was to have replaced the existing 10 CFR 73.55(c)(9)(iii) and (iv). However, the commenter argued that 10 CFR 73.55(c)(9)(iii) and (iv) only address the vehicle barrier system; whereas, proposed 10 CFR 73.55(e)(2), as worded, would apply to all physical barriers constructed to deter, delay, and prevent the introduction of unauthorized personnel, vehicles, or materials into controlled areas.

**NRC Response:**

The Commission agrees in part. The Commission agrees that the current 10 CFR 73.55(c)(9)(iii) and (iv) are limited to only the vehicle barrier system. However, the Commission has determined that the use of physical barriers at a nuclear power reactor facility is not limited to only vehicle barriers. Physical protection programs also use personnel barriers, delay barriers, channeling barriers, and barriers to provide cover for response personnel. This requirement updates the regulatory framework for physical barriers to generically reflect how they are used within the physical protection program. Therefore, the Commission concluded

that this requirement has been and continues to be a standard practice that is currently applied by licensees and therefore, has no impact.

**Comment Summary:**

The commenter also argued that without the current 10 CFR 73.55(c)(8) wording, one would never understand what is meant by the term “comparisons” and that “comparisons” can be considered part of the barrier “analyses.”

**NRC Response:**

The Commission agrees. The Commission has revised the final rule to delete the reference to comparisons because this pre-existing term is no longer needed. The final rule requires that each barrier be designed and constructed to account for site-specific conditions and perform the intended function rather than a specific baseline against which a comparison can be made.

**Comment Summary:**

In addition, the commenter argued that licensees can no longer protect the physical barrier descriptions since most are in plain view by the public and all are in view of site workers. Also, the design, fabrication and placement drawings for barriers do not generally need to be SGI because the barriers themselves are generally in the open, subject to observation. The commenter argued that what must be protected are the “analyses” and functional requirements which describe the design criteria which, if disclosed to the public, could assist an adversary in an act of radiological sabotage.

**NRC Response:**

The Commission disagrees with the suggestion that because a physical barrier is “in plain view by the public” or otherwise exposed to observation, then all associated design and fabrication criteria can also be obtained through observation. The Commission has revised final rule text to clarify that this information must be reviewed against the provisions of 10 CFR 73.21 and designated as SGI only where appropriate.

**Comment Summary:**

The commenter suggested that the NRC reword proposed 10 CFR 73.55(e)(2) to state: “The licensee shall retain in accordance with 10 CFR 73.70, all analyses and functional requirements of the physical barriers and barrier systems used to satisfy the requirements of this section.” Or, the commenter suggested that NRC reword proposed 10 CFR 73.55(e)(2) to state: “The licensee shall retain in accordance with 10 CFR 73.70, all analyses and descriptions of the physical barriers and barrier systems used to satisfy the requirements of this section, and shall protect these records as safeguards information in accordance with the requirements of 10 CFR 73.21, if the unauthorized disclosure of such analyses and descriptions could reasonable be expected to have a significant adverse effect on the health and safety of the public or the common defense and security by significantly increasing the likelihood of theft, diversion, or sabotage of source, byproduct, or special nuclear material.”

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to be consistent with the suggested changes, however, the Commission disagrees with the suggested rule text beyond a clear reference to the criteria in 10 CFR 73.21.

**Comment Summary:**

In 73.55(e)(3)(i), one commenter stated that the term “clearly delineate” is not defined and can be interpreted broadly. The commenter stated that this requirement is ambiguous (e.g., does it mean signage at the ditch, signage on the water, signage on the barrier, markings on a site layout drawing, etc.). Also, the commenter stated that there are no performance criteria in this section and suggested that the Commission delete this provision from the final rule. However, if retained, the commenter suggested that the Commission clarify the meaning and intent of “clearly delineate the boundaries of the area” in the SOCs.

**NRC Response:**

The Commission agrees. The phrase “clearly delineate” was intended to simply and generically describe a requirement to ensure that the barrier is placed or prominently displayed, at a location where its presence would clearly identify where the area to be controlled begins. The Commission intended this requirement to provide the flexibility needed for each licensee to account for site-specific conditions and to answer the questions presented by the commenter (i.e., does it mean signage, markings, etc?). Upon review, the Commission has determined that this requirement is better addressed in guidance and therefore, the Commission has deleted this requirement from the final rule.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(e)(3)(i) adds a requirement to delineate the boundaries of the areas for which the physical barrier provides protection. The commenter argued that, as worded, the proposed requirement appears to require marking the physical barrier or plant area, which is contrary to the need-to-know for SGI. If the intent is to include in the boundary delineation in either the PSP or barrier analyses, then this would duplicate the configuration control documentation. Therefore, the commenter suggested that the Commission delete this provision from the final rule.

**NRC Response:**

The Commission agrees in part. Upon review, the Commission has determined that this requirement is better addressed in guidance and therefore, the Commission has deleted this requirement from the final rule.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(3)(ii) is well-written and performance-based, but the SOC language is confusing and the Commission should revise it as follows: “This requirement would be added to apply the current requirement of 10 CFR 73.55(c)(8) to all barriers. The Commission's view is that the physical construction, materials, and design of any barrier must be sufficient to perform the intended function and therefore, the licensee must meet these standards.”

**NRC Response:**

The SOCs attempted to clarify that the pre-existing requirement 10 CFR 73.55(c)(8) is specific to vehicle barriers only, however, the Commission's expectation is that all barriers, not just vehicle barriers, will meet the final rule design goal/performance-criteria of performing the intended function, rather than a specific baseline construction standard. The Commission concluded that such flexibility is necessary to allow each licensee to account for site-specific conditions.

**Comment Summary:**

A commenter stated that the physical barriers must function consistently with the site protective strategy, which does not always require them to perform all three functions (i.e., visual deterrence, delay, and support access control measures). The commenter recommended that the NRC revise 10 CFR 73.55(e)(3)(iii) to replace “and support” with “or support”.

**NRC Response:**

The Commission agrees that physical barriers must function consistently with the site protective strategy and that all three performance-criteria may not be required of every barrier in every case. Nonetheless, any one criterion will apply to any one intended function, and therefore, each one is valid by itself. The Commission has revised the final rule to clarify the performance-criteria for this requirement.

**Comment Summary:**

Another commenter stated that the provision adds a new requirement for physical barriers to provide visual deterrence. The commenter argued that this requirement is unnecessary to demonstrate an effective protective strategy, was not part of the DBT, and has not been a specific design objective. The commenter noted that in many cases, the design details that make a barrier formidable have been deliberately hidden to enhance its effectiveness. The commenter concluded that without specific guidance, it is unclear what existing physical barriers meet this requirement. Therefore, the commenter suggested that the Commission delete this provision from the final rule.

**NRC Response:**

The Commission agrees in part. The Commission disagrees that this is a new requirement and disagrees with the recommendation to delete this requirement. The use of physical barriers for “visual deterrence” is a long-standing professionally accepted application. Nonetheless, the Commission agrees that the term “visual” is not necessary and has deleted the term “visual” from the final rule.

**Comment Summary:**

A commenter stated that 10 CFR 73.55(e)(10) is inconsistent with the existing regulations and associated regulatory guidance for openings in the PA and VA. First, the commenter said the word “unattended” is confusing and the commenter recommended that the Commission delete it from the final rule. Second, the commenter stated that this requirement would inappropriately apply the 620 cm<sup>2</sup> (96.1 in<sup>2</sup>) or greater requirement to the vehicle barriers, which is impracticable. Third, the commenter stated that none of the security Orders included such a requirement. The commenter recommended that the Commission should revise the provision to state: “Unattended openings in the protected area or vital area barrier established to meet the requirements of this section that are 620 cm<sup>2</sup> (96.1 in<sup>2</sup>) or greater in total area and have a smallest dimension of 15 cm (5.9 in) or greater, must be secured or monitored at a frequency that would prevent exploitation of the opening consistent with the intended function of each barrier.”

**NRC Response:**

The Commission agrees in part. The Commission has determined that “Unattended Openings” are appropriately addressed in RIS 2002-05 and, therefore, need not be addressed by this requirement. The Commission has revised this requirement to generically address openings in any barrier and the need to secure and monitor these openings is dependent upon the intended function to be performed by the barrier and the ability to exploit the opening. This requirement

is intended to establish performance-criteria for barriers to ensure that barrier openings can not be exploited to defeat the intended function of that barrier. The Commission has revised the final rule to delete the specific opening size of 620 cm<sup>2</sup> (96.1 in<sup>2</sup>) or greater because this dimension is specific to personnel barriers and would be inclusive to this requirement only for barriers that are intended to prevent access by persons.

**Comment Summary:**

Another commenter stated that 10 CFR 73.55(e)(10) would be applied to all barriers, even those in the OCA, to include the vehicle barrier system. The commenter stated that that none of these barriers were designed to meet the 96 in<sup>2</sup> opening requirements, which have historically only been applied to PA and VA openings. In addition, the commenter noted that the opening dimensions must reflect those specified in NUREG-0908, "Acceptance Criteria for the Evaluation of Nuclear Power Reactor Security Plan," since this was the NRC guidance utilized to design licensee's PA and VA barriers.

The commenter stated that there are two problems with this proposed requirement. First, the limitations make no sense if applied to the vehicle barriers covered by the proposed 10 CFR 73.55(e), since the objective of such barriers is to exclude vehicles, not people. Second, the dimensions cited differ from the current requirements of 96 in<sup>2</sup> with 6 inch or greater opening, such that the existing PA and VA barriers would have to be re-evaluated and modified if needed.

Therefore, the commenter recommended that the Commission clarify the provision as applying only to PA and VA barriers. The commenter suggested that the Commission revise the provision to state: "Unattended openings in either a protected or vital area barrier established to meet the requirements of this section that are 96 in<sup>2</sup> or greater in total area and have the smallest dimension as 6 in or greater, must be secured or monitored at a frequency that would prevent exploitation of the opening consistent with the intended function of each barrier".

**NRC Response:**

The Commission agrees. The Commission has revised this requirement to generically address openings in any barrier and the need to secure and monitor these openings is dependent upon the intended function to be performed by the barrier and the ability to exploit the opening. This requirement is intended to establish performance-criteria for barriers to ensure that barrier openings can not be exploited to defeat the intended function of that barrier. The Commission has revised the final rule to delete the specific opening size of 620 cm<sup>2</sup> (96.1 in<sup>2</sup>) or greater because this dimension is specific to personnel barriers and would be inclusive to this requirement only for barriers that are intended to prevent access by persons.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(10) imposes requirements on "any barrier established to meet the requirements of this section" when the requirement is clearly not applicable to all such barriers.

**NRC Response:**

The NRC agrees. The Commission has revised the final rule to delete the specific opening size of 620 cm<sup>2</sup> (96.1 in<sup>2</sup>) or greater because this dimension is specific to personnel barriers and would be inclusive to this requirement only for barriers that are intended to prevent access by persons..



**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(e)(6)(v), as worded, would require some facilities to submit exemptions to meet the rule requirements. The commenter noted that the SOC adds a requirement that all construction features of the control room, central alarm station, and last point of control for PA access must be bullet resisting. The commenter stated that the proposed requirement is not performance-based and rather than support the proposed rule that simply requires these spaces to be bullet resisting, it appears to exclude existing bullet resisting configurations composed of overlapping but discontinuous bullet resistant walls or multiple walls in series to meet the bullet resisting requirement. Therefore, the commenter suggested that the Commission revise the SOC to support the performance-based objective of the proposed rule, without reference to “all construction features.” Also, the commenter suggested that the Commission add the phrase “as described in the approved physical security plan” to the end of the provision.

**NRC Response:**

The Commission disagrees. This requirement is a retained pre-existing requirement. The SOC generically addresses all construction because a listing of all possible features is not practical.

**Comment Summary:**

Another commenter stated that the Commission should define the level of the bullet-resisting barrier. The commenter noted that a common definition used is the National Institute of Justice (NIJ) standards and a good recommendation for the control room envelope would be at least NIJ level IV bullet resistance.

**NRC Response:**

The Commission disagrees. The NRC bullet resisting standards and criteria have been provided to licensees in guidance. The Commission has determined that specific bullet-resisting standards are appropriately addressed in guidance, and therefore, the Commission disagrees that a specific bullet-resisting standard should be specified in this rule text.

**Comment Summary:**

Three commenters referred to the proposed 10 CFR 73.55(e)(4). One commenter stated that this new provision is more stringent than any requirements contained in the Orders and is a significant impact on industry which was not evaluated in the Regulatory Analysis. The commenter noted that the only barriers in the OCA are vehicle barriers to provide standoff for vehicle bombs. Further, the commenter stated that the language in proposed 10 CFR 73.55(e)(8) addresses vehicle barriers and thus adequately captures existing requirements for physical barriers in the OCA.

Also, the commenter argued that the following terms are not defined in 10 CFR 73.2 and are ambiguous: “unauthorized access,” “unauthorized activities,” and “approach routes to the facility.” If the Commission retains this provision, the commenter recommended the Commission revise it as follows: “The licensee shall establish and maintain physical barriers in the OCA to support effective implementation of the licensee's protective strategy”.

**NRC Response:**

The Commission agrees in part. The Commission disagrees that this requirement is new and disagrees that it is more stringent than pre-existing requirements. However, the Commission

has revised the final rule to delete the terms addressed by this comment and to clarify that the focus is on the design of the physical protection program and protective strategy.

The Commission disagrees that all sites have only vehicle barriers in the OCA. The types of barriers needed in the OCA can include vehicle barriers, channeling barriers, delay barriers, or even personnel barriers if site-specific conditions necessitate such measures to protect the facility against the DBT, prevent significant core damage and spent fuel sabotage, or otherwise maintain the capability to protect against radiological sabotage. Therefore, the need for physical barriers in the OCA is determined by each licensee through the analysis of site-specific conditions.

**Comment Summary:**

Another commenter stated that the standards to “deter, delay, prevent...” for the OCA are as rigorous as the standards for the PA barrier and will, in a sense, require that the entire barrier/border concept built into the PA be moved out to the OCA. The commenter argued that this would be a tremendous additional expense for the licensees.

**NRC Response:**

The Commission agrees in part. The Commission agrees that the same performance-criteria, applies to each type of physical barrier as needed to perform its intended function, however, the need for that function/barrier in the OCA is site-specific. Therefore, the Commission disagrees that this would the PA to be moved out to the OCA.

**Comment Summary:**

A third commenter stated that the proposed 10 CFR 73.55(e)(4), as worded, implies that licensees must have physical barriers in the OCA, which could be interpreted as requiring personnel barriers to prevent unauthorized access by personnel. The commenter stated that this is a new requirement. The commenter argued that the expectation to deter, delay, or prevent unauthorized access and facilitate early detection in the OCA is unnecessary to demonstrate an effective defensive strategy and cannot be implemented due to the congested layout and/or geography at many sites. Therefore, the commenter suggested that the Commission either delete this provision or reword it to be consistent with existing requirements to state: “The licensee shall establish and maintain vehicle barriers in the owner controlled area to deter, delay, or prevent unauthorized vehicle access, facilitate the early detection of unauthorized vehicular activities, and control vehicle approach routes to the facility”.

**NRC Response:**

The Commission disagrees that this is a new requirement and that this requirement can not be implemented. The Commission agrees that each site is different and that while one site may have a congested OCA, another site may not. This is why each site is required to analyze their site-specific conditions and determine what measures are needed to support an effective physical protection program in the OCA. As such, a determination of what measures are needed in the OCA directly affects the licensee capability to protect against the DBT.

**Comment Summary:**

One commenter stated that, in 10 CFR 73.55(e)(5)(i)(A), the use of the term “unobstructed” is not performance-based and the Commission should reword the provision to state: “Designed and of sufficient size to permit assessment of activities on either side of the PA barrier.”

**NRC Response:**

The Commission agrees in part. The NRC intended the term “unobstructed” to clarify the pre-existing 10 CFR 73.55(c)(3) requirement to “observe activities” on either side of the isolation zone (IZ). The NRC's expectation is that an IZ will be designed to ensure activities can be observed on either side of the PA perimeter. To accomplish this each licensee must account for obstacles that would prevent this observation and design the IZ to ensure timely and accurate observation or assessment of activities can be made. The Commission has revised the final rule to delete the term “unobstructed” from this requirement because the requirement to provide observation on either side of the PA perimeter sufficiently establishes the desired performance that was intended by the term “unobstructed.”

**Comment Summary:**

Similarly, one commenter stated that the word “unobstructed” adds nothing to the performance objectives of proposed 10 CFR 73.55(b) and requirements of 10 CFR 73.55(e)(3), but is overly prescriptive and contrary to the stated consideration of “provid[ing] a more performance-based requirement.”

**NRC Response:**

As stated above, the NRC agrees in part.

**Comment Summary:**

A commenter also stated that 10 CFR 73.55(e)(5)(i)(A) requires an isolation zone on both sides of the PA barrier regardless of a licensee's current approved PA barrier configuration. The commenter argued that this requirement is unnecessary to achieve an effective protective strategy. In addition, the commenter noted that this contradicts the proposed 10 CFR 73.55(e)(6)(iv) that exempts isolation zones in certain cases. Therefore, the commenter suggested that the Commission modify the proposed 10 CFR 73.55(e)(5)(i)(A) to take into consideration the exemption for having obstructions in the isolation zone. The commenter suggested the following language: “Designed and of sufficient size to permit unobstructed observation and assessment of activities on either side of the protected area barrier except as noted in 10 CFR 73.55(e)(6)(i).”

**NRC Response:**

The Commission disagrees. The current requirement in 10 CFR 73.55(c)(3) is retained with only minor revisions. The isolation zone is required to be maintained in outdoor areas adjacent to the PA perimeter. Obstructions that prevent observation would mean that this requirement is not met. The NRC disagrees that the relief stated in the proposed 10 CFR 73.55(e)(6)(i) negates the need for observation. The requirement to observe activities on both sides of the PA perimeter remains applicable at all times. Where a building is part of the PA perimeter an isolation zone is not needed provided appropriate barriers are installed and observation requirements are met.

**Comment Summary:**

With respect to 10 CFR 73.55(e)(5)(i)(B), one commenter stated that assessment equipment and capabilities are more appropriately addressed in proposed 10 CFR 73.55(e)(5)(ii) and should be deleted from this paragraph. Additionally, the commenter stated that evaluation of the detected activity before completed penetration of the PA barrier is more appropriately addressed in proposed 10 CFR 73.55(e)(5)(ii) (i.e., “before and after each alarm annunciation.”). The commenter suggested that the Commission delete the following phrase from the provision:

“and assessment equipment capable of facilitating timely evaluation of the detected unauthorized activities before completed penetration of the protected area perimeter barrier.”

**NRC Response:**

The Commission agrees in part. The Commission agrees that detection and assessment equipment should be addressed individually. Therefore, the Commission has revised the final rule to separate detection equipment versus assessment equipment. Assessment is addressed in the final rule 10 CFR 73.55(e)(5)(i)(C). The Commission disagrees that the requirement for detection "before completed penetration of the protected area perimeter barrier" should be deleted and has retained this requirement in the final rule 10 CFR 73.55(e)(7)(i)(B). The Commission's expectation is that detection will occur before the PA perimeter is penetrated and that the use of video-capture will allow the licensee to assess the cause of the alarm for the period of time preceding the penetration.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(e)(5)(i)(B) contains a new requirement that assessment equipment facilitate evaluation of unauthorized activities before PA barrier penetration. The commenter stated that this requirement is misplaced in this section, is infeasible, and is contrary to the stated consideration of “provid[ing] a performance-based requirement.” The commenter argued that specific design requirements for intrusion detection system (IDS) equipment and assessment equipment should be contained in the proposed 10 CFR 73.55(i) rather than this section. The commenter noted that some scenarios presently envisioned under the DBT, as well as others under consideration, cannot be evaluated before PA barrier penetration and modifications to the DBT may be promulgated outside of 10 CFR part 73. The commenter concluded that the Commission should modify the proposed 10 CFR 73.55(e)(5)(i)(B) to be more consistent with current 10 CFR 73.55(c)(4).

**NRC Response:**

The Commission disagrees that this is a new requirement. However, the Commission has revised the final rule to separate detection equipment versus assessment equipment.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(e)(5)(i)(B) requires IDS equipment capable of evaluation of unauthorized activities “before completed penetration.” The commenter noted that the NRC’s own tests and research acknowledge that penetrations of the PA barrier can be accomplished by skilled adversaries in less than 2 seconds, and also acknowledge that a skilled CAS operator would take longer than 2 seconds to locate the appropriate monitor that is alarming, much less perform the evaluation. Therefore, according to the NRC’s own research, the commenter concluded that it is impossible to meet this standard.

**NRC Response:**

As stated above, the Commission agrees in part. Therefore, the Commission has revised the final rule to separate detection equipment versus assessment equipment.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(e)(5)(ii) appears to refer to video capture, but does not specifically mention it.

**NRC Response:**

The Commission agrees. This requirement is written with performance-based language that is

intended to generically describe the technology that is currently known as video-capture.

**Comment Summary:**

Similarly, another commenter stated that the proposed 10 CFR 73.55(e)(5)(ii) and associated SOC's add a new requirement for video capture. The commenter stated that this requirement is not performance-based, and the performance-based requirement would be for assessment features "as needed" to implement an effective protective strategy.

Also, the commenter noted that it is unclear whether the requirement would apply only to primary assessment capability, or both primary and backup capabilities. The commenter argued that video capture is not needed on the primary system or the backup system if the protective strategy is effective without it. Therefore, the commenter recommended that the Commission revise this section to achieve a performance-based requirement for assessment features "as needed" to implement an effective protective strategy. The commenter suggested adding the phrase "as needed to implement an effective protective strategy" to the end of the provision.

**NRC Response:**

The Commission disagrees. The Commission agrees that this is a new requirement for video capture as is stated in the proposed rule federal register notice (FR 62670). The Commission does not, however, distinguish between primary and back-up systems herein, because back-up systems are understood to be compensatory measures taken in response to a system failure. The Commission agrees that a licensee may choose an alternative measure for satisfying this requirement, however, this requirement captures pre-existing licensee practices regarding use of this equipment and is appropriate to update the NRC's regulations regarding this technology and its use at both pre-existing and future nuclear power reactor facilities. This requirement addresses IZ assessment equipment of which the Commission has determined is a pre-existing licensee application.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(e)(5)(iii) and associated SOC's add a requirement to maintain the areas inside, outside, and adjacent to the PA barrier clear of obstructions. The commenter stated that this requirement is not performance-based, and precludes use of the areas inside the PA barrier for laydown (the performance-based requirement would be for maintaining assessment capability).

The commenter stated that the proposed SOC section would have a significant negative impact on plant operation for sites with small PA footprints. Therefore, the commenter stated that the Commission should reword this provision to achieve a performance-based requirement to control laydown activities within the PA to maintain assessment capability at the PA barrier.

**NRC Response:**

The Commission agrees in part. This requirement is necessary to ensure that the observation and assessment requirements of this section are effectively satisfied. The pre-existing requirement to locate parking facilities outside of the IZ has been updated to ensure that licensee's account for the observation requirements for the IZ when determining the locations to be used for laydown rather than precluding this practice, as is suggested by this commenter. The Commission has revised the final rule to clarify that the focus of this requirement is to not have obstructions inside the IZ. The Commission's expectation is that each licensee will

account for any obstructions by configuring assessment tools to ensure the ability to “see around” the obstruction and thereby, satisfying the performance-criteria of this requirement.

**Comment Summary:**

One commenter noted that proposed 10 CFR 73.55(e)(6)(i) is a new requirement and the current PA barrier requirements satisfy the protection of these penetrations. To more closely align with current design requirements, the commenter recommended that the Commission revise the provision as follows: “The protected area perimeter must be protected by physical barriers designed and constructed to meet Commission requirements and penetrations through this barrier, greater than those allowed by (e)(10), must be secured in a manner that prevents, delays, or detects the exploitation of any penetration.” The commenter added that meeting this requirement for smaller penetrations is not necessary.

**NRC Response:**

The Commission agrees in part. The Commission disagrees that this is a new requirement and has determined that this requirement is an appropriate update to the regulatory framework. However, the Commission agrees that this requirement could include penetrations smaller than those addressed in 10 CFR 73.55(e)(10), but only where that size opening could be exploited to defeat the intended function of the barrier. The performance-criteria for all barriers is directly contingent upon the intended function of that barrier and, therefore, any size opening that can be exploited to defeat the purpose of the barrier is unacceptable and must be secured and monitored.

**Comment Summary:**

Another commenter stated that use of the language “penetrations ... must be secured in a manner that prevents or delays, and detects ...” is ambiguous, duplicative and potentially contradictory to the more clearly stated proposed language of 10 CFR 73.55(e)(10). The commenter noted that one can infer from the SOCs that the intended meaning of 10 CFR 73.55(e)(6)(i) is that an exploitation scenario that is prevented must nevertheless be detectable, which would indicate a wasteful approach antithetical to program effectiveness. Therefore, the commenter suggested that the Commission reword the provision to state: “The protected area perimeter must be protected by physical barriers designed and constructed to meet Commission requirements as specified in the Commission-approved security plan.”

**NRC Response:**

The Commission disagrees that the requirement to detect an attempt to exploit a PA penetration would indicate a wasteful approach antithetical to program effectiveness. The pre-existing requirement in 10 CFR 73.55(c)(4) states, “Detection of penetration or attempted penetration of the protected area or isolation zone...”. The Commission has determined that, as written, this provision retains and is consistent with this pre-existing requirement. In addition, the Commission disagrees with the recommended rule text change because Commission requirements are stated in the regulations, not in approved security plans.

**Comment Summary:**

Another commenter noted that PA barriers are required to be “designed and constructed to meet Commission requirements.” The commenter asked: What are these specific requirements? Is this something that is going to be detailed in guidance? If so, given the wide range of possible outcomes, how can the industry and public comment on this section without knowing what those specific requirements are?

**NRC Response:**

Commission requirements for the design and construction of physical barriers are performance-based such that the licensee is responsible to construct, install, and maintain physical barriers that are designed to perform a stated function within the physical protection program. The specific design and construction of a barrier is determined by site-specific conditions and is predicated upon the intended function to be performed.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(e)(6)(iii) does not match most facility PA configurations and is more appropriate for VA portals which contain “crash bars;” whereby, upon emergencies, personnel can bypass the portal locking devices for emergency exit only, but the portal will alarm upon exiting this way. Therefore, the commenter suggested that, since PA turnstiles do not alarm upon emergency exiting, the Commission should revise the proposed 10 CFR 73.55(e)(6)(iii) to replace the term “protected area” with “vital area” and replace “alarmed” with “alarm upon an emergency exit.” Or, the commenter suggested that the NRC could reword the provision to allow dual-use entry/exit portals that can be unlocked for emergency exit while still prohibiting unauthorized entry.

**NRC Response:**

The Commission agrees. The Commission has revised the final rule and the SOCs to clarify the scope of this requirement and to eliminate unintended implications. Although not desired, the Commission agrees that dual use portals may be designated as emergency exits, however, it is important to note that where such dual use portals are used for entry and emergency exit, all NRC requirements for access/entry apply. In addition, when not attended, emergency exits must be locked and alarmed to delay and detect unauthorized entry into the PA or VA. The Commission agrees that PA turnstiles need not be alarmed because they are not unattended. However, the Commission disagrees that this requirement only applies to VAs and is consistent with the pre-existing 10 CFR 73.55(e)(3) which applies to both PA and VA.

**Comment Summary:**

For 10 CFR 73.55(e)(6)(iv), a commenter stated that the list of barrier components includes walls and roofs, but the inclusion of penetrations seems incorrect here. The commenter noted that a penetration is typically thought of as an engineering, operational, or construction necessity (e.g., a drainage pipe). If penetration, in this requirement, is meant to refer to personnel and vehicle portals, the commenter suggests that the provision clearly specify this. Otherwise, the commenter argued that the traditional protections for penetrations (i.e., drainage pipes, etc.), such as locks and alarms, would not be consistent with the current requirement.

**NRC Response:**

The Commission agrees. The Commission has revised the final rule to delete "or penetrations" from the final rule.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(6)(vi) is not consistent with the Orders and the security plan template. The commenter recommended that the Commission replace the word “All” with “Appropriate.”

**NRC Response:**

The Commission disagrees. The word “all” is retained from the pre-existing 73.55(c)(4). The

proposed rule mistakenly did not identify the pre-existing rule text as the basis of this requirement. The pre-existing 10 CFR 73.55(c)(4) states “All exterior areas within the protected area shall be periodically checked to detect the presence of unauthorized persons, vehicles, or materials. As the term “All” is a pre-existing requirement, it is retained without revision. However, the Commission has added a provision for relief where site-specific conditions preclude meeting this requirement for safety reasons.

**Comment Summary:**

Another commenter stated that 10 CFR 73.55(e)(6)(vi) adds a requirement to periodically check all exterior areas within the PA for unauthorized activities, personnel, vehicles and materials. The commenter argued that this provision would be impossible to comply with in all cases since some PA exterior areas are not accessible due to either safety or limited access considerations. The commenter noted that the proposed requirement is not performance-based, and is unclear as to the level or periodicity of the search that would be expected.

In addition, the commenter notes that with all the existing security controls in place (e.g., designated/non-designated vehicle controls, PA intrusion detection/assessment capabilities, PA closed-circuit television (CCTV), PA badging/access controls, fitness-for-duty (FFD) program, BOP, Access Authorization and Control Program, Insider Mitigation Program, material/personnel/vehicle search requirements), a new requirement such as this one is overkill and serves no valid protective purpose. Therefore, the commenter suggested that the Commission delete this provision from the final rule.

**NRC Response:**

As stated above, the Commission disagrees that this is a new requirement. The word “all” is retained from the pre-existing 10 CFR 73.55(c)(4).

**Comment Summary:**

Another commenter asked: Can the exterior areas within the PA that must be periodically checked for unauthorized activities be checked by CCTV? How about IDS? If not, the commenter said the Commission should change the wording of 10 CFR 73.55(e)(6)(vi) .

**NRC Response:**

Consistent with the proposed 10 CFR 73.55(i)(5) and (i)(6), the use of electronic video equipment to accomplish the periodic checks is an acceptable supplement to patrols but is not sufficient, in-and-by itself.

**Comment Summary:**

Two commenters stated the cross-reference in 10 CFR 73.55(e)(7)(i) to proposed 10 CFR 73.55(f)(2) is an error. One of the commenters stated that this provision requires that VA barriers be designed and constructed to perform their required function, except according to paragraph (f)(2). However, (f)(2) refers to cyber attacks, which have little or nothing to do with VA barriers (except at the personnel portals).

**NRC Response:**

The Commission has deleted this reference in the final rule as it is not necessary. The correct reference is the proposed 10 CFR 73.55(f)(3).

**Comment Summary:**



The other commenter stated that the correct reference is 10 CFR 73.55(t).

**NRC Response:**

The Commission has deleted this reference in the final rule as it is not necessary. The correct reference is the proposed 10 CFR 73.55(f)(3).

**Comment Summary:**

Another commenter supported proposed 10 CFR 73.55(e)(7)(i), which requires vital equipment be located only in VAs. The commenter noted that at Three Mile Island (TMI) the control room air intake building has been located in the PA -- the licensee was able to rationalize this over a conflict of what constitutes "vital equipment." The commenter concluded that control room operators must be protected from incapacitating agents.

**NRC Response:**

The Commission has determined that this comment is outside the scope of this rulemaking.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(7)(v) inappropriately includes the phrase "all vital areas," which is confusing and above and beyond the requirements in the current regulations and Orders. The commenter noted that the correct reference in the current regulations is 10 CFR 73.55(d)(7)(i)(D), which addresses access to all VAs. The commenter stated that this requirement should more appropriately focus on all VA access portals and emergency exits.

Additionally, the commenter stated that the requirement that "emergency exit locking devices shall be designed to permit exit only" may be construed to mean that keys cannot be used from outside. If this is the case, it could impact operations and security emergency response and security defensive strategies that rely on responders entering the VA through the emergency exit with the use of a security controlled key. Therefore, the commenter suggested that the Commission revise the provision to state: "The licensee shall protect all vital area access portals and vital area emergency exits with intrusion detection equipment and security controlled locking devices."

**NRC Response:**

The Commission agrees. The correct pre-existing requirement upon which this requirement is based, is 10 CFR 73.55(d)(7)(i)(D). The Commission's intent regarding emergency exits was based on a literal application of the term "as a penetration that is used for egress only." The Commission acknowledges that this proposed requirement did not account for current licensee vital area entry/exit procedures that require individuals to "card-out" as well as card-in. Therefore, the Commission has revised the final rule to allow the use of entry/exit portals as emergency exits as is pre-existing licensee practice. The term "vital areas" has been deleted to clarify that the intended focus of this requirement is on portals and not the interior areas of a vital area.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(e)(7)(v) is not performance-based (a performance-based requirement would be to demonstrate an effective protective strategy). The commenter argued that VA IDS adds no significant capability for the DBT if the VA portals are alarmed and the remaining barriers are substantial enough to require explosive breach (turbine grating, concrete walls, etc.).

In addition, the commenter noted that it is not feasible to backfit VA barrier IDS into existing facilities, particularly where the barrier is a wall with equipment on both sides (e.g., the walls between the turbine building and adjoining vital structures). Therefore, the commenter recommended that the NRC delete the added requirement for VA IDS. Also, the proposed requirement for emergency exit locking devices should be revised for consistency with the existing use of solenoid-controlled VA portals, which can be opened in one direction to allow emergency exit, while still remaining locked from the outside prohibiting unauthorized entry.

**NRC Response:**

The Commission agrees in part. The term “vital areas” has been deleted to clarify that the intended focus of this requirement is on portals and not the interior areas of a vital area. Additionally, the Commission has revised the final rule to allow the use of entry/exit portals as emergency exits as is pre-existing licensee practice.

**Comment Summary:**

One commenter stated that the proposed provision expands the requirements beyond those required by the current rule and Orders. The commenter noted that, specifically, it expands the requirement pertaining to “secondary power supply systems” from just “alarm annunciator equipment” to all “intrusion detection and assessment equipment”. The commenter argued that the need for such a significant expansion is not explained nor is it supported by the NRC Force-on-Force inspections completed to date. Therefore, the commenter suggested that Commission revise the provision by replacing “intrusion detection and assessment” with “alarm annunciator.”

**NRC Response:**

The Commission agrees in part. Upon review, the Commission concluded that the proposed requirement would have unintentionally expanded the requirement to protect all IDS and assessment equipment back-up power sources as VAs. Upon review the Commission concluded that not all IDS and assessment equipment are connected to the same secondary power source required by the pre-existing 10 CFR 73.55(e)(1) for alarm annunciation equipment. Therefore, the proposed rule would have required that the back-up power sources for each component or grouping of IDS and assessment equipment be protected as a VA. This consequence goes beyond the Commission’s intent.

The Commission intended only to update the regulatory framework to require back-up power for IDS and assessment equipment consistent with the use of this technology. Alarm annunciation equipment is one component within the intrusion detection and assessment "system" and all other components of that system must also operate from back-up power to generate the signal needed to activate annunciation equipment.

To clarify the NRC's intent and expectations, the Commission has revised the final rule in 10 CFR 73.55(e)(9)(vi)(A) to retain the pre-existing 10 CFR 73.55(e)(1) requirement that secondary power supply systems for alarm annunciation equipment must be protected as “vital equipment,” located in a vital area. Additionally, the Commission has added 10 CFR 73.55(i)(3)(vii) to independently address back-up power for IDS and assessment equipment and to clarify that these back-up power supplies need not be protected as vital equipment.

The Commission has determined that addressing only secondary power for “alarm annunciator

equipment” is no longer technically correct and does not accurately represent the use of this technology. The Commission has concluded that, to ensure that an alarm is generated and that an assessment of each alarm can be made, all components within the intrusion detection and assessment system, such as sensors, routers, multiplexers, cameras, etc., must also function through back-up power. Without back-up power to all supporting equipment within the “system”, the signal required to activate the alarm annunciation equipment and make an assessment of the cause of the alarm, would not be generated, and therefore, detection will not occur, rendering the secondary power supply to "annunciation equipment" useless.

**Comment Summary:**

Another commenter stated that it is unclear how proposed 10 CFR 73.55(e)(7)(iii) would apply to the outside of the spent fuel pool walls. It is the walls, rather than the equipment within, that are of interest for spent fuel sabotage, which requires uncovering the fuel. The commenter noted that the outside of the spent fuel pool walls are in non-VAs at many facilities. However, the walls may be bunkered to prevent breach by DBT threats below the top of the spent fuel, and/or grade level at the non-vital walls may be above the elevation at which spent fuel sabotage could occur. Therefore, the commenter suggested that the Commission revise this provision to clarify that it applies only to the inside of the spent fuel pool. The commenter stated that if the Commission’s intent is to include the outside of the walls as well, then clarification is needed that this only applies to portions of the walls where breach by the DBT threat could credibly result in spent fuel sabotage.

**NRC Response:**

The Commission disagrees. This requirement does not intend to address the unique construction concerns that are associated with spent fuel pools but rather simply requires that the interior of a spent fuel pool structure, be protected as a vital area. The exterior of the spent fuel pool is inside the protected area and is afforded protection against unauthorized activities.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(7)(iv) is redundant to proposed 10 CFR 73.58 and should be deleted to eliminate any confusion that this requirement goes beyond the requirements in 10 CFR 73.58. The commenter stated that limited compensatory actions, if needed, per proposed 10 CFR 73.58 would more appropriately address maintenance on vital equipment. Therefore, the commenter recommended that the Commission delete this provision from the final rule.

**NRC Response:**

The Commission agrees. The Commission has deleted this requirement from the final rule to avoid unintended duplication and impact beyond current requirements. The Commission's expectation is that licensees will ensure that the potential impact of out-of-service conditions is analyzed and appropriate actions are taken if needed.

**Comment Summary:**

One commenter stated that the header should clarify that 10 CFR 73.55(e)(8) applies only to land-based vehicles.

**NRC Response:**

In the final rule, the Commission has revised this section (now 10 CFR 73.55(e)(10)) to generically address vehicle control measures as part of the physical protection program design. The final rule in 10 CFR 73.55(e)(10)(i) addresses land vehicles, and the final rule in 10 CFR

73.55(e)(10)(ii) addresses waterborne vehicles.

**Comment Summary:**

One commenter stated that licensees must protect against vehicle bombs with a force of up to 20,000 lbs. of explosives and account for the ground shock wave which can overcome earthquake proofing measures.

**NRC Response:**

The NRC has determined that this comment is outside the scope of this rulemaking and is addressed by the Commission in 10 CFR 73.1 "Design Basis Threat".

**Comment Summary:**

Another commenter stated that a land vehicle should not be limited to a four-wheeled drive car or truck, as is the case now, but include the full range of trucks and other vehicles, such as boats, a group like Al Qaeda might employ in an attack.

**NRC Response:**

The NRC has determined that this comment is outside the scope of this rulemaking and is addressed by the Commission in 10 CFR 73.1 "Design Basis Threat".

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(8)(iv) expands the purpose of the vehicle barrier beyond that specified in the Order. The commenter explained that the vehicle barrier's purpose is to prevent a vehicle bomb attack from reaching an area where it could disable equipment necessary for the safe shutdown of the plant. It is not a purpose of the vehicle barrier to prevent any type of vehicle from delivering unauthorized personnel to the proximity of the plant PA.

The commenter stated that implementation of this proposed requirement could require the installation of a "protected area" type barrier in addition to the current vehicle barrier. Further, the commenter stated that this is a significant new requirement that is not evaluated in the Regulatory Analysis. If it is not the Commission's intent to impose a new requirement, the commenter recommended the Commission delete the provision from the final rule.

**NRC Response:**

The Commission agrees in part. The Commission disagrees that this is a new requirement. However, the Commission revised this requirement, consistent with the pre-existing 10 CFR 73.55(c)(7), to generically address vehicle control measures as applicable to land vehicles, watercraft, trains, and other vehicles that are within the DBT as stated in 10 CFR 73.1. The final rule in 10 CFR 73.55(e)(10)(i) addresses land vehicles, and the final rule in 10 CFR 73.55(e)(10)(ii) addresses waterborne vehicles.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(e)(8)(iv) is not performance-based (the performance-based requirement would be ensuring that the combination of the VBS and other barriers including the PA fence prevent unauthorized vehicle entry to the PA). The commenter argued that vehicle use does not need to be stopped at the VBS or prevented in proximity to the PA if the vehicles could not reach or breach the PA barrier (e.g., motorcycles between bollards).

The commenter recommended that the Commission revise the provision for consistency with the existing DBT to ensure that the combination of the VBS and other barriers including the PA

fence prevent unauthorized vehicle entry to the PA. To accomplish this, the commenter recommended that the Commission replace the phrase “beyond a vehicle barrier system” with “beyond the stand-off distance needed to effectively implement the protective strategy, maintain safe shutdown capabilities, and prevent spent fuel damage” and delete the phrase “gain proximity to a protected area or vital area, or otherwise penetrate the protected area perimeter.”

**NRC Response:**

The NRC agrees in part. The Commission revised this requirement, consistent with the pre-existing 10 CFR 73.55(c)(7), to generically address vehicle control measures as applicable to land vehicles, watercraft, trains, and other vehicles that are within the DBT as stated in 10 CFR 73.1. The final rule in 10 CFR 73.55(e)(10)(i) addresses land vehicles, and the final rule in 10 CFR 73.55(e)(10)(ii) addresses waterborne vehicles.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(e)(8)(i) expands the purpose of the vehicle barrier to include control of personnel and all design basis vehicles which are beyond that specified in the Order. The commenter noted that the vehicle barrier’s purpose is to prevent a vehicle bomb attack from reaching an area where it could disable equipment necessary for the safe shutdown of the plant. It is not a purpose of the vehicle barrier to prevent any type of vehicle from delivering adversaries to the proximity of the plant. The commenter argued that existing protective strategies adequately address this situation and implementation of this requirement could require the installation of a “protected area” type barrier in addition to the current vehicle barrier which is not supported by NRC Force-on-Force inspections completed to date. Additionally, the commenter noted that the provision has no performance basis.

Therefore, the commenter recommended that the Commission revise the provision to state: “Prevent unauthorized vehicle access or proximity to any area from which the vehicle’s contents (vehicle bomb threat as discussed in the design basis threat) could disable equipment needed for safe shutdown of the plant or the personnel, equipment, or systems necessary to successfully implement the protective strategy.”

**NRC Response:**

The Commission agrees in part. This proposed 10 CFR 73.55(e)(8)(i) is subsumed in the final rule in 10 CFR 73.55(e)(1)(i) and (e)(10). The Commission disagrees that licensees need only to protect against the vehicle bomb. The pre-existing 10 CFR 73.55(c)(7) requires vehicle control measures to preclude vehicle proximity to VAs. Therefore, it is the Commission’s expectation that vehicle control measures will include protection against any vehicle, land or water based, within the DBT, for which the licensee’s site-specific analysis has identified a need to protect against.

The Commission agrees that the purpose of the VBS is to prevent a vehicle bomb attack from reaching an area where it could cause radiological sabotage and disagrees with the assumption that the licensee is not required to prevent other types of vehicles from transporting adversaries or materials to areas of the facility from which the adversary or material could disable the licensee’s capability to protect against radiological sabotage.

**Comment Summary:**

Another commenter stated that the phrase “proximity to” in 10 CFR 73.55(e)(8)(i) makes the proposed rule too vague. The commenter argued that it is not necessary to include this phrase

if vehicles are excluded from the areas from which unacceptable damage could occur. With this phrase, the commenter stated that the rule could be construed to include any area outside the vehicle barrier system (VBS), even when control of vehicles in the area is not required to demonstrate an effective defense against either the stand-alone or coordinated attack. Further, the comment stated that the intent of including “its personnel” also is unclear, as it is not feasible to prevent adversaries from launching a coordinated attack from anywhere outside of the VBS. The commenter recommended that the Commission delete the phrases “proximity to” and “its personnel” from the final rule.

**NRC Response:**

The pre-existing 10 CFR 73.55(c)(7) requires vehicle control measures to preclude vehicle proximity to VAs. The term proximity as used in the final rule is retained from the pre-existing 73.55(c)(7).

The Commission agrees that the purpose of the VBS is to prevent a vehicle bomb attack from reaching an area where it could cause radiological sabotage. However, the Commission disagrees with the assumption that the licensee is not required to prevent other types of vehicles from transporting adversaries or materials to areas of the facility from which the adversary or material could disable the licensee’s capability to protect against radiological sabotage.

**Comment Summary:**

One commenter stated that this provision requires that licensee have land vehicles capable of preventing access that would disable personnel, equipment, or systems necessary to meet performance objectives of 10 CFR 73.55(b). Paragraph 73.55(b) requires diversity and redundancy of equipment. Thus, the commenter asked, “Must the licensee prevent land and waterborne vehicle access to all redundant sets of equipment also, or simply ensure that both sets are not disabled?”

**NRC Response:**

The Commission has revised the final rule to clarify that licensees are not required to protect individual pieces of equipment, which comprise defense-in-depth. The Commission’s intent for the defense-in-depth requirement is so that the loss of any one component does not cause the failure of the entire physical protection program. Therefore, the licensee can lose redundant equipment provided at least one set remains capable of performing its required function.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(e)(8)(ii) is too broad and should be re-written to define the approach routes expected to be controlled. Further, the commenter noted that, as delineated in 10 CFR 73.55(e)(8)(iii), licensees must design and install a vehicle barrier system, to include passive and active barriers, at a stand-off distance adequate to protect personnel, equipment, and systems against the DBT. Therefore, the installed vehicle barrier system, in and of itself, serves as the control of vehicle approach routes. The commenter recommended that the Commission delete this provision from the final rule.

**NRC Response:**

The Commission agrees in part. This proposed requirement is subsumed in the final rule in 10 CFR 73.55(e)(10). The specific measures needed to limit and control vehicles are determined by site-specific conditions. Approach routes can be controlled through the use of vehicle

controls such as vehicle barriers, channeling barriers, natural terrain, etc. the intent of which is to provide a common access path which in turn facilitates the identification of potential threats that may leave the common access path, thereby providing early detection of a possible threat.

**Comment Summary:**

Another commenter stated that the proposed requirement in 10 CFR 73.55(e)(8)(ii) is not performance-based. The commenter argued that the provision is not only not “critical” but utterly unnecessary to control vehicles outside the VBS and OCA in order to demonstrate an effective defense against either the stand-alone or coordinated attack. The commenter noted that the only pertinent requirement is from the February 25, 2002 Interim Compensatory Measures (ICM) Order, which is to control access by means of a vehicle checkpoint. The commenter recommended that the Commission either delete this provision from the final rule or make it consistent with the requirements outlined in the February 25, 2002 ICM Order.

**NRC Response:**

The Commission disagrees. The specific measures needed to limit and control vehicles are determined by site-specific conditions. Approach routes can be controlled through the use of vehicle controls such as vehicle barriers, channeling barriers, natural terrain, etc. the intent of which is to provide a common access path which in turn facilitates the identification of potential threats that may leave the common access path, thereby providing early detection of a possible threat.

**Comment Summary:**

Another commenter stated that having guards at the entrance to Three Mile Island would be consistent with the proposed rule regarding main entrance and alternate routes. Guards at the entrance would provide both a visual deterrent to attackers by signaling multiple layers of defense, and also would provide a level of observation that cannot be provided by security cameras alone.

In order to preserve a viable response plan for offsite responders, the bridges to Three Mile Island, which are currently vulnerable to attack, must be protected. The current SCP calls for emergency responders to be transported to the island by watercraft or aircraft, but does not take into account weather conditions where these options are not viable. The commenter also stated that members of the public have been detained for crossing an inconspicuous blue line near the north entrance to Three Mile Island, when there is no sign or indication that crossing this line is not permitted.

**NRC Response:**

This suggested requirement is site-specific and is not within the scope of this rulemaking. Where such site-specific measures are determined necessary through site-specific analysis for protection against the design basis threat of radiological sabotage, the performance-based requirements of this rule would require that such measures be taken. In addition, the Commission has determined that local roads and bridges that are not subject to licensee control are equally important and vulnerable to attack with regards to the capability of offsite support agencies to respond to any site. The requirement to control vehicles once onsite is generic to protection against the design basis threat of radiological sabotage and, therefore, is intended to be flexible to allow each licensee to apply the measures as necessary to meet the performance objective and requirements of 10 CFR 73.55(b).

**Comment Summary:**

Multiple commenters stated that they would like to see armed guards both at their present location and at the entrance to Three Mile Island off Route 441.

**NRC Response:**

As stated above, this suggested requirement is site-specific and is not within the scope of this rulemaking.

**Comment Summary:**

One commenter stated that having guards on the east shore off of Three Mile Island is not worth the trouble because it could raise many more false alarms. It would be clear that if someone tried to cross one of the bridges that it would not be a false alarm. The commenter stated that having guards off the island would also draw more attention to the presence of the nuclear power plant.

**NRC Response:**

As stated above, this suggested requirement is site-specific and is not within the scope of this rulemaking.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(8)(iii) expands the purpose of the vehicle barrier to include all aspects of the DBT which is beyond the Order requirements. The commenter recommended that the Commission revise the provision by replacing the phrase “and systems against the design basis threat” with “vehicle bomb threat as discussed in the design basis threat.”

**NRC Response:**

The Commission agrees in part. The NRC has revised the final rule to specifically address the “land vehicle bomb”. The Commission's expectation is that licensees will protect the personnel, systems, and equipment needed for safe shutdown and to implement the protective strategy, against the effects of the vehicle bomb.

**Comment Summary:**

Another commenter stated that 10 CFR 73.55(e)(8)(iii) exceeds the DBT requirement for standoff from the personnel, equipment and systems required for protection of the reactor, spent fuel, and implementing the protective strategy. The commenter argued that the provision unnecessarily requires protection for all personnel, equipment and systems, even those that are not required to be protected to prevent radiological sabotage or spent fuel sabotage.

Also, the commenter noted that implementation would require a new VBS to provide the additional standoff, which is not feasible within the existing OCA at many facilities. The commenter suggested that the NRC revise the provision to limit it to the personnel, equipment and systems required for protection of the reactor, spent fuel, and implementing the protective strategy, consistent with the existing DBT. To do this, the commenter suggested that the NRC replace the phrase “against the design basis threat” with “needed to implement the protective strategy, maintain safe shutdown capabilities, and prevent spent fuel damage by the design basis threat.”

**NRC Response:**



The NRC has revised the final rule to clarify that licensees will protect the personnel, systems, and equipment needed for prevention of significant core damage and spent fuel sabotage against the effects of the vehicle bomb.

**Comment Summary:**

One commenter noted that 10 CFR 73.55(e)(8)(iii) establishes the standoff distance to accomplish 10 CFR 73.55(e)(8)(i). The commenter argued that the requirement does not specify personnel (administrative, training, response, operational, etc.) and does not refer to whether the redundancy standard fits here. Thus, the commenter asked: Is the standoff distance required to protect all personnel?

**NRC Response:**

The Commission does not identify the specific personnel, systems, and equipment that require protection because such a determination is site-specific and must be identified to satisfy 10 CFR 73.55(b)(4). The Commission has revised the final rule text to clarify the scope of this requirement.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(8)(v) is unclear concerning the extent of periodic checking needed, particularly whether loss of power testing must be included. The commenter recommended that the Commission clarify the provision or SOC regarding whether or not the periodic checks must include loss of power testing.

**NRC Response:**

The Commission disagrees. The specific periodicity for testing is system-specific. The Commission's expectation is that this periodicity will be of appropriate frequency as to ensure operability of the equipment. The licensee must determine if loss of power testing is appropriate for the equipment used to ensure that it is operable.

**Comment Summary:**

Another commenter supported the requirement for backup electricity or for a manual closure capability of vehicle barriers, and periodic tests of their operability. This was one of the lessons learned at Three Mile Island on September 11, 2001, when guards could not close the entrance barrier because there was no electricity to power it shut.

**NRC Response:**

No response needed.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(8)(vi) could be broadly interpreted to mean "continual" surveillance and observation requiring the use of closed-circuit television or other continuous means. The commenter noted that at the March 9, 2007, public meeting, the NRC indicated that they believe this proposed requirement is already implemented through the Orders and is already part of the site plans. The commenter did not agree and recommended that the Commission revise the provision to state: "Provide periodic surveillance and observation of installed vehicle barriers and barrier systems to detect tampering and to ensure the integrity of the vehicle barrier and barrier system."

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule text to include the word "periodic" to clarify that this requirement is not continuous and the words "tampering" and "degradation" to clarify the focus of the periodic surveillance. The Commission's expectation is that the licensee will identify adverse conditions that would prevent the VBS from performing its function before the condition can be exploited.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(e)(8)(vi) is not performance-based. Also, the commenter stated that the provision could be construed to require continuous camera observation of all portions of the VBS, which is beyond what is currently required for the DBT. Further, the commenter stated that the undefined term, "unauthorized activities," has a different meaning in this subsection than in all other uses throughout proposed changes to 10 CFR 73.55 and should be deleted. The commenter stated that the SOC implies that the meaning of "unauthorized activities" in this section is "tampering." If so, the commenter recommended that the Commission replace the phrase "to detect unauthorized activities" with "to detect tampering." The commenter also recommended that the NRC should revise the rule or SOC to require a level and frequency of inspection for vehicle barriers commensurate with the mass and robustness of the barrier, and consistent with the DBT.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule text to include the word "periodic" to clarify that this requirement is not continuous and has replaced the phrase "unauthorized activities" with the term "tampering". Additionally, the Commission disagrees that the level and frequency of inspection for vehicle barriers must be commensurate with the mass and robustness of the barrier. The final rule requires that vehicle barriers (regardless of construction) must be inspected at a level and frequency adequate to detect indications of tampering and degradation, and ensure that the barrier is able to satisfy its function. The rationale for this performance-based requirement is that site-specific conditions effect the necessary periodicity. For example, sites that are located near the ocean may need to account for the effects that salt air has on metal which could necessitate more frequent inspections than would be needed at sites located in a dry, desert environment.

**Comment Summary:**

One commenter supported requirements that licensees provide protection from watercraft. The commenter stated that the only way that this can be realistically handled is with water craft barriers, which can delay entry into restricted waterways. Buoy lines are not sufficient. The commenter stated that monitoring is not sufficient. The commenter recognized the hardship this places on licensees which would have to replace floating barrier systems damaged by ice and noted that it may be cost-effective to deploy permanent barrier systems.

**NRC Response:**

The Commission agrees in part. The Commission disagrees that the only way to protect waterway approaches is through the use of physical barriers. The Commission has determined that the specific protective measures required to satisfy this requirement are site-specific and are predicated upon maintaining the capability to prevent significant core damage and spent fuel sabotage and implementation of the site protective strategy. The Commission agrees that, in some cases, water craft barriers may be the preferred measure however, at other sites, different measures may be most appropriate and this flexibility is needed to adequately account

for site-specific conditions.

**Comment Summary:**

Another commenter suggested some options for security of waterways: secure the perimeter with floating water barriers, require a net across the mouth of the intake canal to prevent explosives being sent up, such as was recommended and offered to Millstone nuclear power station in Connecticut by the Department of Homeland Security, and increase surveillance.

**NRC Response:**

The Commission agrees in part. As stated above, the Commission agrees that the suggested options could be viable options given the appropriate site-specific conditions. However, such detailed measures are “options” and are not appropriate for this rulemaking.

**Comment Summary:**

One commenter stated that waterborne defenses of nuclear plants adjacent to navigable waterways must be significantly enhanced. The commenter stated that facilities must either be engineered to withstand damage from a waterborne attack or suited with physical barriers that prevent entry to the plant and/or critical cooling intake equipment.

**NRC Response:**

The Commission agrees in part. The measures needed at any one site are site-specific and they consider the effects stated by this commenter.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(e) attempts to address the threat of a waterborne vehicle attack by requiring licensees to restrict approaches to the plant by water, and to “install waterborne vehicle control measures, where applicable.” The commenter noted that this degree of regulatory flexibility is in sharp contrast to the vehicle barrier requirements found in 10 CFR 73.55(e)(8)(iii), which state that the licensee must “design and install a vehicle barrier system, to include active and passive barriers, at a stand-off distance adequate to protect personnel, equipment, and systems against the design basis threat.”

The commenter stated that at the March 9, 2007, public meeting, the NRC was asked about this difference in oversight, and responded that local and state jurisdiction of waterways made it less likely that the NRC could make the same requirement for waterborne barriers. Therefore, the NRC recommended a higher level of regulatory flexibility to accord licensees more latitude to comply with this new requirement.

Using an Indian Point example, the commenter noted that Entergy has installed floating buoys to delineate a 300-yard exclusion zone in front of the plant -- clearly the licensee has been accorded a certain level of control over this section of the Hudson River, from the buoy perimeter inward to the bulkhead of the plant property. The commenter asked: Why, then, is the NRC reluctant to require that Entergy replace the buoys with a system of floating, waterborne barriers that would deter or prevent a range of water-based attacks?

**NRC Response:**

The Commission disagrees that a different protection standard applies for protection against waterborne vehicles. The final rule requires that each licensee provide protection against the design basis threat vehicle bomb from both land and waterway approaches. The Commission acknowledges that there are significant differences between land vehicles and watercraft and

the ability of each to continue its forward momentum. Specifically, with respect to a waterborne vehicle, the shoreline or land itself may act as a watercraft barrier and can provide sufficient standoff distance. Therefore, depending on site-specific conditions, there may be no need to require a watercraft barrier. The same applies to land vehicle barriers. Natural terrain features can be used to as part of the VBS where site-specific conditions support this use. Nonetheless, the requirement to protect against vehicle bombs, applies to both land and waterway approaches.

**Comment Summary:**

One commenter suggested that the Commission combine 10 CFR 73.55(e)(9)(i) and 73.55(e)(9)(iv) because, in many cases, assistance will be required from outside agencies. The commenter recommended that the Commission revise the provision to state: “The licensee shall establish measures to prevent unauthorized waterborne access or proximity to any area from which a waterborne vehicle, its personnel, or its contents could disable equipment needed for safe shutdown of the plant or the personnel, equipment, or systems necessary to successfully implement the protective strategy.”

**NRC Response:**

The Commission agrees in part. This proposed requirement is subsumed in the final rule in 10 CFR 73.55(e)(10). However, the Commission disagrees with the suggested rule text change.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(9)(i) requires that licensee have the capability of preventing access that would disable personnel, equipment, or systems necessary to meet performance objectives of 10 CFR 73.55(b). Paragraph 73.55(b) requires diversity and redundancy of equipment. Thus, the commenter asked: Must the licensee prevent land and waterborne vehicle access to all redundant sets of equipment also, or simply ensure that both sets are not disabled?

**NRC Response:**

Licensees are required to maintain the capability to prevent significant core damage and spent fuel sabotage which may in turn necessitate the use of equipment. Therefore, the licensee is required to protect (remain operable to perform intended function) a minimum of one (1) group of equipment required to prevent significant core damage and spent fuel sabotage, but is not required to protect equipment that is redundant to the one (1) protected group.

**Comment Summary:**

Another commenter stated that the proposed requirement for controlling waterway approach routes is not performance-based and it is unnecessary to control vehicles outside the OCA in order to demonstrate an effective defense against either the stand-alone or coordinated attack. In addition, the commenter stated that the phrase “proximity to” makes the proposed rule too vague, and is not necessary if vehicles are excluded from the areas from which unacceptable damage could occur. The commenter noted that this phrase could be construed to include any area outside the OCA, even when control of waterborne vehicles in the area is not required to demonstrate an effective defense against either the stand-alone or coordinated attack. The commenter stated that the intent of including “its personnel” also is unclear, as it is not feasible to prevent adversaries from launching a coordinated attack from anywhere outside of the OCA.

The commenter stated that the NRC should delete the proposed requirement for controlling

waterway approach routes, add a qualifier that allows the exclusion for those facilities not impacted by waterborne vehicles, and delete the phrases “proximity to” and “its personnel” from this provision. Additionally, the commenter recommended that the Commission replace the phrase “as described in paragraph (b) of this section” with “as described in the Commission-approved security plan.”

**NRC Response:**

The Commission disagrees. The term “proximity” was used consistent with the pre-existing 10 CFR 73.55(c)(7). The Commission disagrees with the suggested rule text changes.

**Comment Summary:**

A commenter stated that the final rule must address the risk of waterborne attacks by requiring an equivalent level of protection for both water-based and land-based vehicle threats. The commenter stated that the Commission must remove the “where applicable” language of 10 CFR 73.55(e)(9)(ii), and additional language needs to be added to clarify the requirement for “waterborne vehicle control measures,” so that they also “protect personnel, equipment and systems against the design basis threat.”

**NRC Response:**

The Commission agrees in part. The NRC has revised the final rule in 10 CFR 73.55(e)(10)(i) and (ii) to clarify the performance-criteria for both land and water based vehicles. Licensees are required to protect against the adverse effects that a vehicle bomb could have on their capability to prevent significant core damage and spent fuel sabotage to include the capability to implement the site protective strategy.

The NRC disagrees with the suggestion to require waterborne control measures at all sites without consideration to site-specific conditions. Each site must design the physical protection program to account for site specific conditions. The Commission revised the final rule to clarify that waterborne vehicle control measures are determined through site-specific analysis and that where the analysis has identified a need, measures must be taken to account for the identified condition. The phrase “where applicable” is revised to “as necessary” in the final rule.

**Comment Summary:**

A commenter recommended that the Commission combine 10 CFR 73.55(e)(9)(iv) with 10 CFR 73.55(e)(9)(i).

**NRC Response:**

The Commission disagrees. The Commission concluded that this requirement is appropriate as a stand-alone requirement. The requirement to “coordinate” is intended to apply where a licensee has determined that waterway physical protection measures are prudent, but the licensee does not own or have rights to that waterway. In such cases the licensee must request authorization from the governmental entity having jurisdiction or ownership of the affected waterway.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(e)(9)(iii) is more stringent than the requirements contained in the current regulations and Orders. The commenter argued that the need to “monitor waterway approaches and adjacent areas to ensure early detection, assessment, and response to unauthorized activity or proximity” is protective strategy-dependent. The commenter recommended that the Commission revise the provision to state: “As needed to

successfully implement the protective strategy, the licensee shall monitor waterway approaches and adjacent areas to ensure response to unauthorized intruders is provided.”

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to clarify that surveillance and observation of waterway approaches is site-specific and must ensure the effective implementation of the site protective strategy.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(e)(9)(iii) is not applicable to all facilities. The commenter stated that, similar to the proposed rule wording in the new 10 CFR 73.55(e)(9)(ii), the Commission should add a qualifier that allows the exclusion for those facilities not impacted by waterborne vehicles. Therefore, the commenter suggested that the NRC add the phrase “as applicable” after “adjacent areas.”

**NRC Response:**

The Commission agrees in part. The Commission agrees that this requirement is not applicable to sites and must be applied in accordance with site-specific analysis required by the final rule 73.55(b)(4). However, the NRC disagrees with the suggested rule text change.

**Comment Summary:**

One commenter at the November 15, 2006, public meeting asked for a clarification of the relationship between target sets and vital equipment. The NRC responded that the difference between vital equipment and target sets would be that target sets include vital equipment, but vital equipment does not always contain everything that may be part of a target set. Target sets would be the combination of equipment, systems, even personnel, that would need to be disabled or destroyed in order to cause a problem. So, the commenter deduced that vital equipment would be part of the target set, but the target set, itself, may include additional things to it that would also be protected.

The NRC explained that requiring licensees to protect target sets protects those systems, personnel, or equipment that are necessary for a safe shutdown. The NRC concluded that vital equipment is related to safe shutdown and target sets are related to release. Another commenter at the November 29, 2006, public meeting asked if a licensee can lose vital equipment without either losing the ability for safe shutdown or losing a target set. The NRC responded that yes, it is possible.

**NRC Response:**

Vital equipment is related to safe shutdown while target sets are related to release of radioactive material (or significant core damage and spent fuel sabotage). Therefore, the physical protection program design criteria in 10 CFR 73.55(b) focuses on prevention of significant core damage and spent fuel sabotage and the ability to effectively implement the protective strategy as performance-criteria resulting from the protection of target sets.

**Comment Summary:**

A commenter at the November 15, 2006 public meeting asked if a NUREG from the 1990s is a good source for defining vital equipment.

**NRC Response:**

NRC published information remains acceptable unless otherwise stated by the Commission.

**Comment Summary:**

One commenter stated that there must be a requirement to identify certain bridges as “targets.” The commenter stated that this should include access bridges, which if lost, would adversely affect or even negate the offsite responders’ capabilities. The commenter argued that since the Commission is requiring licensees to “identify target sets” and “to include analyses and methodologies used to determine and group the target set equipment or elements,” and because numerous emergency scenarios rely upon offsite responders as one of those “elements” to prevent “significant core damage or spent fuel sabotage,” bridges must be identified as targets.

**NRC Response:**

The Commission disagrees. This comment is sufficiently addressed through Commission regulations pertaining to protection against the DBT. This commenter suggests that bridges leading to a facility must be protected to ensure an offsite response is able to reach the facility. Upon consideration, the Commission has determined that the suggested protection for bridges is impractical and unnecessary because the tactic of destroying bridges also applies equally to all other public road surfaces and bridges between the facility and the location from which the offsite response will originate. Therefore, the Commission concluded that the suggested requirement constitutes an unreasonable regulatory burden that is outside the scope of this rulemaking.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(f)(1) would require licensees to document their target set development process in “site procedures,” but other site documents (e.g., engineering calculations versus site procedures) were utilized to document this process. The commenter argued that it is not necessary to limit the documentation to site procedures, provided that the methodology is documented and maintained consistent with the site configuration control process. The commenter recommended that the Commission revise this provision to require the methodology to be documented and maintained consistent with the site configuration control process. The commenter recommended that the Commission delete “in site procedures” from the provision.

**NRC Response:**

The Commission agrees. The requirement to document this process “in site procedures” has been deleted from final rule text to clarify that it is acceptable for the licensee to reference rather than include, supporting documentation. This documentation must be maintained in accordance with the final rule 10 CFR 73.55(q) "Records" and made available to the NRC upon request and in a timely manner needed to support any NRC inquiry or inspection.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(f)(2) is more stringent than the Orders. If retained, the commenter recommended that the Commission move the language to 10 CFR 73.55(m) so that the requirements for cyber security are listed together. Further, the commenter suggested that the Commission revise the language by adding the word “disabling” before “individual equipment.”

**NRC Response:**

The Commission disagrees. The focus of this requirement is on "Target Sets" and the effects that cyber attacks can have to "disable" or prevent target set equipment from performing its function. The requirements in the proposed 10 CFR 73.55(m) have been moved to a stand-alone 10 CFR 73.54 and focus on the broader cyber security program. Therefore, the Commission concluded that this requirement is appropriate to this paragraph.

**Comment Summary:**

Another commenter stated that 10 CFR 73.55(f)(2) only makes sense if the normal, emergency, backup, or alternate safe shutdown equipment is digitally controlled. The commenter argued that in cases where only local, manual operation of systems is credited, this requirement imposes an unnecessary burden with no value. In addition, the commenter noted that no guidance has been developed for implementing such a requirement. Lastly, the commenter noted that the NRC approved the guidance contained in NEI 03-11, "Guidance for the Preparation and Conduct of Force-on-Force Exercises," Revision 1, dated December 2005, Chapter 4, "Target Set Development," and the associated NRC-developed "Target Set Information Worksheet." These documents did not require consideration of cyber attacks.

Since this was what the existing target sets are based on, the commenter said that such a new requirement, as proposed in the new 10 CFR 73.55(f)(2), would require all licensees to revise their existing target sets and associated documentation. Accordingly, the commenter recommended that the NRC delete the provision from the final rule.

**NRC Response:**

The Commission disagrees that this is a new requirement and has concluded that it appropriately updates Commission regulations consistent with the DBT stated in 10 CFR 73.1 which includes cyber attack capabilities. The Commission's expectation is that licensees will ensure that the cyber capabilities attributed to the design basis threat are accounted for in the developed target sets and if necessary, each licensee will re-evaluate developed target sets to consider the affects of a cyber attack. Therefore, the Commission disagrees with the suggested rule text change.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(f)(3) is more stringent than the Order requirements. The commenter argued that incorporating target set equipment or elements that are not contained within a protected or vital area or otherwise, into the security plan, will limit flexibility in responding to the changing threat environment in a timely manner since changes would require prior NRC review and approval. Thus, the commenter recommended that the Commission delete this requirement from the final rule.

**NRC Response:**

The Commission agrees in part. The Commission agrees that listing target-set equipment in the NRC-approved security plan is an unnecessary regulatory burden, as it would require plan changes whenever site-conditions change. Therefore, the Commission has revised the final rule to require that these target set elements be identified through the documentation required in 10 CFR 73.55(f)(1), the product of which is a listing of target sets that can be modified without prior Commission approval. Given this revision, the Commission disagrees with the recommendation to delete this requirement.

**Comment Summary:**



Another commenter noted that 10 CFR 73.55(f)(3) adds a requirement that the target set equipment outside the PA or VA must be explicitly identified in the approved security plans, and addressed by the licensee's protective strategy. The commenter stated that it is unclear what benefit, if any, inclusion of this information in security licensing and plant level documents would provide. The commenter stated that for the DBT, the specific equipment included in target sets is already identified in the target set documents and addressed by the tamper protection portion of the insider mitigation program (IMP). The commenter recommended that the Commission revise the provision to require that such equipment be explicitly identified in the target set documents and included in the tamper protection portion of the IMP.

Accordingly, the commenter recommended that the Commission replace "approved security plans and protective measures for such equipment or elements must be addressed by the licensee's protective strategy in accordance with appendix C to this part" with "licensee's target set documents and included in the tamper protection portion of the Insider Mitigation Program."

**NRC Response:**

The Commission agrees in part. Therefore, the Commission has revised the final rule to require that these target set elements be identified through the documentation required in 10 CFR 73.55(f)(1), the product of which is a listing of target sets that can be modified without prior Commission approval. However, the Commission disagrees that reference to the IMP is necessary because this element of the IMP is addressed in 10 CFR 73.55(f)(4).

**Comment Summary:**

One commenter stated that Operations already have controls in place to maintain configuration control through normal operations and surveillance and the proposed 10 CFR 73.55(f)(4) requirement should only address obvious tampering. Additionally, the commenter noted that the terms "significant core damage" and "spent fuel sabotage" are not defined terms in 10 CFR 73.2. The commenter recommended that the NRC delete the phrase "to ensure that changes to the configuration of the identified equipment and systems do not compromise the licensee's capability to prevent significant core damage and spent fuel sabotage" from the final rule.

**NRC Response:**

The Commission agrees in part. The Commission agrees that licensee Operations already have controls in place that may satisfy this requirement and it is the Commission's expectation that these pre-existing controls will be used. In addition, this requirement is intended to be incorporated as an element of the Insider Mitigation Program to include obvious indications of tampering. Therefore the NRC considers this to be a current requirement consistent with current licensee practices. The NRC has deleted reference to "significant core damage and spent fuel sabotage" from the final rule to clarify that the focus of this requirement is on oversight of target set equipment to ensure that the licensee's protective strategy is not adversely impacted by configuration changes to target set equipment.

**Comment Summary:**

Another commenter stated that 10 CFR 73.55(f)(4) is redundant to other provisions in the proposed rule (e.g., 10 CFR 73.55(i)(9) and 10 CFR 73.58). Therefore, the commenter recommended that the Commission delete proposed 10 CFR 73.55(f)(4) from the final rule.

**NRC Response:**

The Commission disagrees. The Commission has determined that this requirement is related to but not redundant to the referenced requirements and is necessary to establish the regulatory

framework and performance-criteria connecting oversight of target set configuration to the IMP and safety/security interface.

**Comment Summary:**

A commenter stated that the proposed 10 CFR 73.55(g) does not close a dangerous loophole in current search requirements for law enforcement personnel and security officers. The commenter noted that the current rule at 10 CFR 73.55(d)(1) states that, “The licensee shall control all points of personnel and vehicle access into a protected area ....” The licensee shall subject all persons except bona fide Federal, State, and local law enforcement personnel on official duty to these equipment searches upon entry to a protected area. Armed security guards who are on duty and have exited the protected area may reenter the protected area without being searched for firearms.”

The commenter stated that proposed 10 CFR 73.55(g)(1) no longer specifically authorizes these exceptions to the search procedures, but would still allow them, subject to Commission review and approval. The commenter argued that such exceptions could provide insiders or corrupt law enforcement personnel collaborating with adversaries with significant opportunities to introduce contraband, silencers, ammunition or other unauthorized equipment that could be used in an attack. The commenter stated that this practice should be explicitly forbidden in the rules except under extraordinary circumstances, as approved by the Commission.

**NRC Response:**

The Commission disagrees. The specific provisions addressed by this comment were retained from the pre-existing rule and remain applicable through the provisions of the final rule in 10 CFR 73.55(g)(4) and 73.55(h)(8). The Commission has determined that retention of these requirements is appropriate and consistent with NRC requirements for background checks, psychological assessments, and behavior observation (trustworthiness and reliability). It must be noted that armed security personnel are searched prior to reporting for duty and being issued a firearm. This provision simply allows armed personnel to exit the PA with their assigned weapon, to perform official duties and then re-enter without re-search for a firearm.

With respect to bona fide Federal, State, and local law enforcement personnel on official duty, they are subject to their own trustworthiness and reliability determinations which are outside the scope of this rulemaking. It is important to note that this flexibility does not relieve the licensee of its responsibility to prevent the introduction of unauthorized items or materials that would otherwise be prevented from access and only applies to those weapons or items that are “issued to designated armed personnel in the performance of “official duties”.

**Comment Summary:**

Several commenters stated that proposed 10 CFR 73.55(g)(1)(i) is more stringent than current regulations and Order requirements.

**NRC Response:**

The Commission disagrees. The Commission has revised the final rule to clarify that the scope of this requirement is limited to the intended function of each access portal. The specific function is determined by each licensee based on site-specific analysis.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(g)(1)(i) requires personnel control into the OCA; whereas, currently only vehicle control into the OCA is required. The commenter recommended

that the Commission revise this provision by deleting “any” before “applicable areas” and adding the phrase “in accordance with the Commission-approved security plans” to the end of the provision.

**NRC Response:**

The Commission agrees in part. The Commission has revised final rule in 10 CFR 73.55(b) and in this requirement to clarify that access controls in the OCA are based on site-specific conditions. The use of a VBS or other physical barrier in the OCA is a product of the licensee’s analysis of their site-specific conditions. The Commission disagrees with the suggested rule text change because NRC requirements are stated in the regulations, not in the licensee security plans.

**Comment Summary:**

Another commenter argued that 10 CFR 73.55(g)(1)(i) is ambiguous and can be interpreted broadly to apply new requirements to the OCA (e.g., vehicle barrier) that are impracticable and unnecessary. The commenter recommended that the Commission revise the existing language for PA access to include materials and add a new section to address access through the OCA vehicle barrier system. The commenter provided the following suggested language for 10 CFR 73.55(g)(1)(i): “Control all points of personnel, vehicle, and material access into the protected area established to meet the requirements of this section.” The commenter provided the following suggested language for 10 CFR 73.55(g)(1)(i)(A): “Control vehicle access, capable of transporting the design basis threat bomb, through the vehicle barrier system, established to meet the requirements of this section.”

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to clarify the scope of this requirement consistent with the final rule in 10 CFR 73.55(b). The use, placement, and function of any barrier in the OCA is contingent upon the licensee's site-specific analysis and must be constructed to meet a site-specific need identified by the licensee through that analysis. Therefore, it is the licensee who determines if a barrier is necessary in the OCA to satisfy this requirement. The Commission agrees that access controls to the protected area can be independently addressed and has revised 10 CFR 73.55(g)(2) to address PA access controls.

**Comment Summary:**

One commenter stated that the rule (for example, in 10 CFR 73.55(g)(1)(i)) broadly imposes requirements on “any area” or “all areas” when previously it specified the specific area.

**NRC Response:**

The Commission disagrees. The references to "any area" and "all areas" were used generically to represent the facility areas that each licensee identifies through the site-specific analysis. For example, the licensee determines the stand-off distance needed to support the physical protection program and meet NRC requirements. This stand-off distance can be in the OCA or at the PA perimeter.

**Comment Summary:**

A commenter stated that proposed 10 CFR 73.55(g)(3)(i) uses the vague term “as appropriate,” and the Commission should replace this term with more performance-based criteria. The commenter recommended that the Commission replace “as appropriate” with “as described in the Commission-approved security plans.”

**NRC Response:**

The Commission agrees in part. The Commission has deleted the phrase "as appropriate" and has revised the final rule to replace "as appropriate" with "consistent with the intended function." However, the NRC disagrees with the suggested rule text change.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(g)(1)(v) is more stringent than the requirements contained in the Orders, which require surveillance capabilities and duress alarms. The commenter suggested that the Commission revise this provision to state: "Provide surveillance or duress alarms for badging processes located outside the protected area."

**NRC Response:**

The Commission disagrees. This requirement, as worded, provides an appropriate performance-based requirement which allows the licensee to determine the site-specific measures needed to meet the requirement which may include the two measures specified by this comment. The Commission determined that this flexibility for licensees to apply site-specific measures is appropriate. It is clear by this comment that the commenter does understand that this is a pre-existing requirement (i.e., not more stringent) and that the use of surveillance and duress alarms can satisfy this requirement.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(g)(1)(v) does not encompass current industry guidance. The commenter noted that the actual ICM guidance for Item B.4.h, states, in part, "If the badging area is outside the protected area, develop a means to avoid unauthorized bypass of the badging process or install duress capability or surveillance capability...." This commenter recommended that the Commission revise the provision to state: "Provide a means to avoid unauthorized bypass of access control equipment located outside the protected area."

**NRC Response:**

The Commission disagrees. This requirement, as worded, provides a performance-based requirement which allows the licensee to determine the site-specific measures needed to meet the requirement. The NRC has concluded that the commenter clearly recognizes that this is a pre-existing requirement to which the referenced guidance applies.

**Comment Summary:**

One commenter noted that 10 CFR 73.55(g)(1)(iii) would require licensees to limit unescorted access to the PA during non-emergency conditions. The commenter stated that licensees currently limit unescorted access to VA during non-emergency conditions to individuals who require access in order to perform their duties. Also, many licensees grant unescorted access to the PA (with no VA access) to workers who do not frequently enter the PA, but who may have the possibility of needing access at some undefined time in the future. In addition, the commenter noted that having certain site workers limited to unescorted PA access affords their placement into the licensee's behavior observation and Fitness for Duty or critical group programs should those workers be performing critical work even though they do not have a job-related need to access the PA. Therefore, the commenter recommended that the Commission revise this provision by replacing the phrase "limit unescorted access to the protected area and vital areas" with "limit vital area unescorted access".

**NRC Response:**

The Commission disagrees that this requirement places any new or unacceptable limits on licensee employees or contractors, nor does it require licensee process changes for unescorted PA or VA access. This requirement is a fundamental program requirement intended to limit unescorted access to only those individuals who require access to perform duties. The licensee is responsible to determine who requires unescorted access and what duties are assigned to them whether those duties require daily or intermittent access. Personnel who require intermittent access are not limited by this requirement but are limited only by their assigned duties. Personnel, who do not have duties to perform, must not be granted unescorted access.

**Comment Summary:**

A commenter stated that 10 CFR 73.55(g)(1)(iv) is more stringent than the current requirements and Orders. As written, the commenter argued that the proposed language is ambiguous and can be interpreted broadly. For example, the commenter asked: What is the meaning of the terms “monitor,” “integrity,” and “access control system?” The commenter concluded that 10 CFR 50 Appendix B requires adequate quality controls for licensees; thus, the Commission should delete this provision.

**NRC Response:**

The Commission agrees in part. The Commission has concluded that this requirement is sufficiently addressed by the final rule in 10 CFR 73.55(g)(1)(i)(C) and therefore, has been deleted. The Commission's expectation is that the licensee will ensure that all access controls are working as intended and have not been compromised such that no person, vehicle, or material is able to gain unauthorized access beyond a barrier.

**Comment Summary:**

Two commenters stated that 10 CFR 73.55(g)(2) appears to expand the current requirements for the PA into the OCA without sufficient clarification of the performance measures, and that the results of the NRC Force-on-Force inspections do not support expanding these requirements.

**NRC Response:**

The Commission disagrees. The proposed rule attempted to address access controls generically with specific implementing differences between OCA and PA being described in the approved security plans. However, based on comments, the final rule is revised to prescriptively specify requirements for OCA and PA individually. This requirement is revised to address access to the PA only, and is revised to delete reference to the NRC-approved security plans which was intended to reflect the current licensee practice of describing the site-specific OCA vehicle search process in the security plans.

**Comment Summary:**

Further, one commenter stated that the performance measures for access controls in the OCA should be related solely to ensuring the effective implementation of the protective strategy, and 10 CFR 73.55(g)(2) should only apply to access to the PA. The commenter recommended that the Commission clarify this provision by replacing the phrase “an access control point” with “a protected area access control point.”

**NRC Response:**

The Commission agrees in part. The Commission agrees that access controls in the OCA must support the effective implementation of the protective strategy, however, the primary focus of

security measures in the OCA is on ensuring the effectiveness of the physical protection program of which the protective strategy is a component. Therefore, access controls in the OCA must support the effective implementation of the physical protection program and not be limited to only the protective strategy.

**Comment Summary:**

The same commenter noted that 10 CFR 73.55(g)(2)(i) and (g)(2)(ii) have requirements that are not required for the OCA per current regulations and Orders.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule text to limit these requirements to only PA access. However, consistent with the proposed rule and current licensee practice, the Commission intended to apply these proposed requirements generically with the licensee specifying the implementing differences between OCA and PA in their security plans.

**Comment Summary:**

It is also noted that 10 CFR 73.55(g)(2)(iv) is not required for the OCA per current regulations and Orders, and that the requirement to check the industry database should be relocated to 10 CFR 73.56 for unescorted access and to 10 CFR 73.55(g)(7)(i) of this section for escorted access.

**NRC Response:**

The Commission agrees in part. The Commission agrees that this proposed requirement is PA specific and has revised the final rule to limit it to PA access only. However, the NRC disagrees that this requirement should be relocated to 10 CFR 73.56 and has retained it in the final rule 73.55(g)(2)(iii).

**Comment Summary:**

For 10 CFR 73.55(g)(2)(iii), it is noted that the contents are not required for the OCA per current regulations and Orders other than in relation to the DBT vehicle bomb.

**NRC Response:**

The Commission agrees in part. Consistent with the final rule in 10 CFR 73.55(b) the licensee must protect against all capabilities of the DBT that can endanger the public health and safety. It is the responsibility of the licensee to identify the facility areas from which the DBT can accomplish this and protect against it. It is evident by this comment that the commenter understands that this requirement is applicable to the OCA regarding the current use of a vehicle barrier in the OCA at some sites.

**Comment Summary:**

One commenter noted that the use of the word “qualified” in proposed 10 CFR 73.55(g)(5)(ii) is problematic because it could unnecessarily require maintenance of “qualification cards.” Thus, the commenter recommended that the Commission delete the term “qualified” from the provision.

**NRC Response:**

The Commission agrees. The Commission has revised final rule text to delete the term qualified to avoid unintended record keeping and has added reference to the escort

requirements addressed in 10 CFR 73.55(g)(8) for consistency.

**Comment Summary:**

Another commenter expressed dismay that the NRC proposed to “loosen” the requirement for armed security for all vehicles inside a nuclear power plant’s protected or vital areas unless the vehicle is specially designated for use in such areas. The commenter further stated that the provision provides no explanation for the change to this requirement, particularly given that there appears to have been no change in the threat environment that might warrant this loosening of security.

**NRC Response:**

The Commission disagrees that this requirement loosens the requirement for armed security for all vehicles inside the PA. The current requirement in 10 CFR 73.55(d)(4) does not require armed escort for all vehicles, but rather requires that the escort be a member of the security organization, who may be an unarmed watchman. The Commission agrees that the proposed rule did not clearly state the rationale for changes to this requirement. The Commission determined that the requirements for access authorization, search requirements, controls once inside the PA, and the escort standards specified by the final rule in 10 CFR 73.55(g)(8), provide a sufficient basis to allow the licensee the flexibility to use non-security personnel for this function.

Vehicle operators must be authorized unescorted access to the PA or must be escorted by a person granted unescorted access who can call for assistance if needed. Further, consistent with the pre-existing requirement for “designated” vehicles, all vehicles in the PA must have a need for access. The Commission has determined that simply designating a vehicle for use inside the PA adds little value and is, therefore, no longer necessary.

**Comment Summary:**

Another commenter sought clarification of what type of equipment is intended in proposed 10 CFR 73.55(g)(5)(ii).

**NRC Response:**

The revised 10 CFR 73.55(g)(8) specifies escort standards and has deleted reference to equipment. The term “equipment” was intended to be generic and could include anything needed to perform escort duties, such as radio.

**Comment Summary:**

One commenter stated that use of the term “disabled” in the proposed 10 CFR 73.55(g)(5)(iii) could be interpreted to mean more than removing the keys from a vehicle. Thus, the commenter recommended that the Commission replace “disabled” with “placed in a condition such that the vehicle would not be in a ready-to-use configuration.”

**NRC Response:**

The Commission agrees in part. The final rule is revised to specify that keys must be removed or the vehicle must “disabled”. The term disabled is intended to be flexible to allow each licensee to determine the best methodology for their site subject to NRC inspection.

**Comment Summary:**

One commenter stated that the Commission should better define the term “hazardous materials” in the proposed 10 CFR 73.55(g)(5)(iv) in accordance with current guidance to clarify the performance criteria. Also, the commenter stated that the Commission should add the phrase “or driven by personnel with unescorted access” to the end of the proposed text, which would provide adequate control of these vehicles to prevent unauthorized use to prevent effective implementation of the protective strategy.

**NRC Response:**

The Commission disagrees with the suggested change to the rule text because it is not consistent with current Commission expectations. Because hazardous materials pose a unique threat to a facility, vehicles carrying hazardous materials inside the PA must be escorted by armed security personnel only. The Commission disagrees that hazardous materials should be defined by this rulemaking to be consistent with guidance. Guidance is written to provide an acceptable method to meet requirements. As stated, hazardous materials are described in current guidance.

**Comment Summary:**

A commenter stated that the NRC should delete “lists” from this provision and replace it with “approval.” The commenter argued that doing so would allow several means of access control based on authorized approval.

**NRC Response:**

The Commission disagrees. This requirement is retained from the pre-existing requirement for vital area access to be controlled by an access authorization list.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(g)(1)(vii) is more stringent than current requirements or Orders. The commenter stated that the procedures for implementing the two-person rule should address the controls required and the term “specific threat” appears to be an expansion of the current requirement to implement the two-person rule. The commenter recommended that the Commission revise the provision to state: “In response to a site specific credible threat, as defined by the Commission, implement a two-person (line-of-sight) rule for all personnel in vital areas.”

**NRC Response:**

The Commission agrees. The final rule is revised to include the term “site-specific” and “credible.” Also, the proposed requirement to verify that the two person rule is met when a vital area is accessed is deleted because such a requirement constitutes a requirement to verify compliance with this requirement. Compliance is already required, and therefore, this statement is not needed.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(g)(1)(vii) implements requirements that are more stringent than the NRC ICM Order, dated February 25, 2002. The commenter noted that the NRC Order required implementation of the two-person rule only for a “credible insider threat,” but the proposed rule requires this for any security threat. Therefore, the commenter recommended that the NRC revise the provision by replacing the phrase “specific threat and security information” with “a site-specific credible threat”



**NRC Response:**

The Commission agrees. As stated above, the Commission revised the final rule to include the term "site-specific" and "credible."

**Comment Summary:**

One commenter argued that proposed 10 CFR 73.55(g)(4)(i) is very broad and could conceivably allow the licensee to drop all access controls in an emergency, while limiting access to authorized individuals. The commenter asked: "Is there a phrase missing here, perhaps 'without compromising the intended function of the access control' or 'including posting of security officers to monitor personnel access?'" The commenter noted that some detail is provided in the proposed 10 CFR 73.55(g)(4)(ii), but that section should at least be referenced here."

**NRC Response:**

The Commission disagrees. It is important that licensees are not exempt from access control requirements during an emergency. The scope of this requirement is further addressed in 10 CFR 73.55(g)(5)(ii). The Commission disagrees that this requirement, as written, could allow a licensee to drop all access controls in an emergency. Even under emergency conditions, the licensee is responsible to deny access to persons who are not authorized (do not have a job related need) for access. This performance-criteria is applicable at all times.

**Comment Summary:**

One commenter noted that during a crisis event there is the possibility that terrorists could infiltrate a nuclear facility by posing as first responders, especially in firefighter uniforms, which would allow terrorists increased access to a facility to carry out even more destructive activities.

**NRC Response:**

The Commission disagrees. Licensees are not exempt from access control requirements during an emergency. Licensees are required to maintain the capability to protect against the DBT at all times which also includes emergency conditions.

**Comment Summary:**

Another commenter referenced the proposed 10 CFR 73.55(g)(4)(ii)(B) and requested clarification of the word "authorized." The commenter asked if the term means that access that would be unauthorized under non-emergency situations, or unauthorized even under the more lax conditions of an emergency.

**NRC Response:**

The Commission determined that the correct reference for this comment is 10 CFR 73.55(g)(4)(ii)(A) not (B) as indicated in the comment. The term "authorized" as used in the final rule 73.55(g)(5)(ii) refers to emergency personnel. The licensee determines which personnel are authorized during an emergency. Under non-emergency conditions, such personnel do not possess a job related need for prompt access. Under non-emergency conditions such personnel may be processed a visitor as required by the final rule in 10 CFR 73.55(g)(7).

**Comment Summary:**

Another commenter recommended that the Commission replace the terms "significant core damage" and "spent fuel sabotage" with the term "radiological sabotage" because "radiological sabotage" is a defined term in 10 CFR 73.2 and the other terms are not.

**NRC Response:**

The Commission disagrees. The NRC determined that this requirement is sufficiently addressed by 10 CFR 73.55(b)(3) and, therefore, has deleted this proposed requirement from the final rule.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(g)(4)(iii) is more stringent than current regulations and Orders.

**NRC Response:**

The Commission disagrees. However, the Commission determined that this requirement is sufficiently addressed by 10 CFR 73.55(b)(11) and, therefore, has deleted this proposed requirement from the final rule.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73.55(g)(6)(ii), in conjunction with proposed 10 CFR 73.55(g)(6)(ii)(A), imply that “passwords” are considered access control devices, which must be controlled and accounted and only issued to individuals who require unescorted access to perform official duties and responsibilities. The commenter noted that this is a new interpretation of the current 10 CFR 73.55(d)(8) requirements and will necessitate the use of integrated directory management systems, which will add to the complexity and cost of new and existing computer systems.

The commenter stated that this type of account management system is not common for most process control vendors and several years may be necessary for vendors to incorporate this functionality into their systems. The commenter concluded that it is not clear if this applies only to access control computers or to nuclear significant computers located in VAs that allow remote access. Therefore, the commenter recommended that the Commission delete the term “passwords” from the provision.

**NRC Response:**

The Commission disagrees. The Commission has determined that passwords act the same as keys to allow the holder access to the information or systems/equipment that must be protected. The Commission agrees that there are differences in the type of media used and therefore differences in “how” these access control devices are controlled and accounted for but disagrees that this requirement encompasses any more than the commonly used and accepted standard key and lock and/or password control methodologies currently in use for each media type.

Consistent with pre-existing requirements for key, lock, and combination controls, the Commission’s expectation is that licensees will ensure that passwords are issued only to those individuals who require access, and that the licensee implements a methodology to ensure passwords are not compromised, are changed consistent with accepted professional standards, and are disabled when access is no longer needed.

**Comment Summary:**

Two commenters stated that the proposed 10 CFR 73.55(g)(6)(ii) co-mingles the requirements for passwords with keys, locks, and combinations, which can lead to confusion and result in a broad interpretation of the requirements and cause unintended consequences.

**NRC Response:**

The Commission disagrees. This requirement does not encompass any more than the commonly used and accepted standard key and lock and/or password control methodologies currently in use.

**Comment Summary:**

One commenter recommended that the Commission should address passwords comprehensively in one single section in this rule. The commenter also stated that accounting for passwords defeats the purpose of having passwords, and it is possible to account for individuals that are provided passwords (addressed in proposed 10 CFR 73.55(g)(6)(ii)(B)). This commenter concluded that long standing information technology processes in place to manage privileged user accounts should be employed to manage passwords.

**NRC Response:**

The Commission agrees with the commenter's conclusion. Consistent with pre-existing requirements for key, lock, and combination controls, the Commission's expectation is that licensees will ensure that passwords are issued only to those individuals who require access, and that the licensee implements a methodology to ensure passwords are not compromised, are changed consistent with accepted professional standards, and are disabled when access is no longer needed.

However, the Commission disagrees that passwords should be addressed separately by this rulemaking and that accounting for passwords defeats the purpose of a password. Accounting for a password simply means ensuring that the person is authorized access to the items that require protection and does not mean "seeing" the password. The Commission agrees that this requirement is intended to be consistent with the long standing information technology processes currently in place to manage privileged user accounts, which should satisfy this requirement subject to NRC inspection.

**Comment Summary:**

A commenter, referencing proposed 10 CFR 73.55(g)(6)(ii), stated that the addition of "security systems" and "safeguards information" introduces new requirements that are more stringent than the requirements of the security Orders. The commenter argued that the terminology could be broadly interpreted as requiring controls and accountability that are unmanageable and would provide little or no benefit in preventing unauthorized access to areas, systems, or information. The commenter stated that access controls for SGI should be contained in 10 CFR 73.21.

**NRC Response:**

The Commission disagrees that the addition of security systems and safeguards information introduce new requirements. However, the Commission agrees that the requirement for safeguards information is more appropriate for 10 CFR 73.21 and has deleted the term "safeguards information" from the final rule.

**Comment Summary:**

A commenter stated that the term "Access Control" is inconsistently used throughout the proposed rule and it is not always clear if "Access Control" refers to password control, hardware, or other control methods. Thus, the commenter recommended that the Commission modify proposed 10 CFR 73.55(g)(6)(ii) to state: "Keys, locks, combinations, and passwords.

All keys and locks, and related access control devices used to control physical access to protected areas, vital areas, security systems, and safeguards information must be controlled and accounted for to reduce the probability of compromise. All passwords and combinations used to control physical access to protected areas, vital areas, security systems, and safeguards information must be controlled and modified periodically to reduce the probability of compromise.”

**NRC Response:**

The Commission disagrees. The term “access control” has been clearly and consistently used throughout this rulemaking as a generic term with generic meaning. Access controls apply generically and equally to both physical and electronic access. This paragraph appropriately addresses generic performance-based requirements, for the “control” of all devices that can be used to gain access (physical or electronic) to areas, materials, systems, equipment, and/or information that has been determined by the licensee to require protection to meet NRC requirements.

**Comment Summary:**

One commenter stated that access to SGI is sometimes necessary for individuals without unescorted access to a facility because they have no need for access to the facility to perform their responsibilities. The commenter stated that proposed 10 CFR 73.55(g)(6)(ii)(A) does not apply to passwords, and passwords are not considered a part of “access control equipment.” The commenter requested that the Commission clarify physical access controls as opposed to electronic access to digital assets.

**NRC Response:**

The Commission agrees in part. The Commission agrees that not all personnel who require access to SGI also require access to the PA. The Commission disagrees that passwords are not access control devices. The Commission has concluded that the distinction between physical and electronic access is not relevant for this requirement. Specific access controls are applied consistent with the media used.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(g)(6)(ii)(A), in combination with the proposed 10 CFR 73.55(g)(6)(ii) would require SGI combinations/locks to be distributed to only those with unescorted access. The commenter stated that this is a new requirement that is not based in the current rule or NRC Order requirements. Thus, the commenter recommended that the Commission reword the provision such that SGI container access control devices are excluded from this requirement (e.g., delete “unescorted” from the provision).

**NRC Response:**

The Commission agrees that not all personnel who require access to SGI, also require access to the PA and has revised the final rule in 10 CFR 73.55(g)(6)(i) to delete the term safeguards information.

**Comment Summary:**

One commenter stated that the Commission should delete the phrase “to include name and affiliation” from 10 CFR 73.55(g)(6)(i)(B) to make the language performance-based. Also, the commenter stated that maintaining a list of passwords is contrary to basic password protection paradigm that only the individual has access to his password. The commenter recommended

that the NRC replace the phrase “and implement a process to account for access control devices at least annually” with “and implement a process to account for physical access control devices at least annually.”

**NRC Response:**

The Commission disagrees. The Commission has determined that access devices must be protected, controlled, and accounted for. To accomplish this, a record containing basic information that identifies the individual to whom the device is issued must be established and maintained. The Commission disagrees that this provision requires a list of passwords. This provision requires only that the name and affiliation of the individual to whom a password is issued be recorded and that a methodology to ensure that passwords have not been compromised and are deleted when no longer needed is implemented. The Commission has concluded that this requirement is a fundamental foundation for all access device control programs and therefore appropriately updates the regulatory framework to address this new technology consistent with existing physical protection program requirements.

**Comment Summary:**

Two commenters stated that 10 CFR 73.55(g)(6)(ii)(C), (D), and (E) do not apply to passwords. One commenter stated that industry-accepted information technology (IT) security practices address the disabling of privilege user access on critical devices. The other commenter stated that the proposed 10 CFR 73.55(g)(6)(ii)(C), (D), and (E) imply that an integrated directory management system may be necessary to reliably disable compromised accounts in a timely manner. The commenter argued that this type of account management system is not common for most process control vendors and several years may be necessary for vendors to incorporate this functionality into their systems. Thus, the commenter recommended that the Commission delete “passwords” from these provisions.

**NRC Response:**

The Commission disagrees. The Commission has concluded that both commentors have implied meaning that is not supported by the written rule text. The Commission’s expectation is that the licensee will know to “whom” passwords are issued, will know “why” that individual requires access, will know to what protected systems that person has access, and will have in place a capability to discontinue that access when no longer needed. The Commission has concluded that when any access control device is compromised, actions must be taken to prevent that device from being exploited.

The Commission agrees that this requirement is intended to be consistent with current industry-accepted IT security practices that address the disabling of privilege user access on critical devices. This is a fundamental security concept to all security programs regardless of what media the device is based on. The Commission disagrees with the comment regarding an integrated directory management system. The Commission has determined that this comment is not supported by the proposed rule as written.

**Comment Summary:**

Referencing proposed 10 CFR 73.55(g)(6)(i)(A), one commenter stated that this provision allows identification badges to be removed from the PA when measures exist to confirm the identity of the person returning with the badge. The commenter asked: “Does facial recognition by access control officers suffice?”

**NRC Response:**

The Commission does not consider facial recognition, alone or absent comparison against a photo ID badge, to be a sufficient methodology to “confirm” the true identity and access authorization of an individual. The Commission requires that at least two unique forms of identification be used and this position has been provided to industry in guidance. Current methodologies include the use of a photo ID badge in conjunction with biometrics.

**Comment Summary:**

One commenter noted that, in recent years, the Commission has relaxed the requirement to change-out all access control devices when the individual departed voluntarily or was terminated not-for-cause. The commenter stated that proposed 10 CFR 73.55(g)(6)(ii)(E) reinstates the more strict requirement of changing-out all devices regardless of reason for the employee’s departure. The commenter asked for clarification of the Commission’s intent with respect to this provision.

**NRC Response:**

This proposed requirement was intended to be a generic requirement to ensure persons who no longer require access are denied access consistent with pre-existing practices and procedures. The Commission has determined that this requirement is sufficiently addressed in the final rule in 10 CFR 73.55(g)(6)(i)(A) which requires that access control devices be issue to only those personnel who require access. When access is no longer needed, that individual no longer meets 10 CFR 73.55(g)(6)(i)(A), and the licensee must follow written procedures that for withdrawing access control devices.

**Comment Summary:**

A commenter stated that the Commission should modify the provision to “the protected area and vital areas” to clarify that escorted access to vital areas is permitted.

**NRC Response:**

The Commission agrees. The Commission has revised the final rule to add vital areas.

**Comment Summary:**

A commenter stated that 10 CFR 73.55(g)(7)(i)(B) should also provide the flexibility for positive identification by personal recognition by an individual with unescorted access who has had sufficient previous contact with the individual to perform this function. Thus, the commenter recommended that the Commission add the following phrase to the end of the provision: “or by an individual with unescorted access who has had sufficient previous contact with the individual to perform this function.”

**NRC Response:**

The Commission disagrees. The Commission has determined that the presentation of identification media is a fundamental and accepted professional standard for initial and recurring visitor processing. The Commission has determined that the suggested relaxation would add no value while decreasing the effectiveness of the visitor control program.

**Comment Summary:**

See Petition for Rulemaking (PRM) 73-13.

**NRC Response:**

10 CFR 73.55(g)(7)(i)(F) is added for consistency with 10 CFR 73.56 and NRC response to PRM 73-13. The Commission has determined that where a licensee is aware of derogatory

information that would result in a denial of unescorted access, the licensee shall not then grant escorted access to that individual. The Commission does not intend to require licensees to actively investigate the background of visitors or subject visitors to the requirements of 10 CFR 73.56, but rather, that to comply with this requirement, the licensee must deny escorted access to the individual where the licensee becomes aware of such information through their visitor control procedures or information sharing mechanisms.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(g)(7)(ii) omits corporate employees who may require frequent but not extended access. Therefore, the commenter argued that corporate employees would not be required to have a photo identification badge, unless “extended access” also implies frequent access over an extended period of employment. The commenter requested that the Commission comment on this issue.

**NRC Response:**

The Commission agrees in part. The Commission considers corporate personnel to be licensee employees and, therefore, would be processed as an employee for unescorted access where determined necessary by the licensee. This requirement addresses non-employees.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(g)(7)(ii) would require photo identification badges to indicate details that do not make sense. The commenter asked several questions with regard to this provision: The commenter asked why the badge must indicate “no escort required” when the “non-employee” has been issued a security badge. The commenter noted that industry would already know this information based on the fact that he/she has the security badge. Thus, the commenter concluded that the new requirement does not add value.

**NRC Response:**

The Commission disagrees that this is a new requirement. This requirement is retained from the pre-existing 10 CFR 73.55(d)(5)(i)(A) and remains valid in support of an effective access control program. This proposed requirement is subsumed in 10 CFR 73.55(g)(7)(ii).

**Comment Summary:**

The commenter also asked why the badge must indicate “authorized access areas” when access to areas may be changed by an authorized supervisor each month. The commenter argued that the badge itself cannot identify this information, and this information should be stored in the security computer (and associated with the badge number).

**NRC Response:**

The Commission disagrees that this is a new requirement. This proposed requirement was retained from the pre-existing 73.55(d)(5)(i)(B). However, upon consideration, the Commission concluded that current technology for badging systems have made obsolete the need for such information to be displayed visually on the badge. Therefore, this pre-existing requirement is deleted from the final rule.

**Comment Summary:**

The commenter asked why the badge must indicate the “period” when the period for which access is authorized may be changed by an authorized supervisor at anytime. The commenter argued that the badge itself cannot identify this information, and this information should be stored in the security computer (and associated with the badge number).

**NRC Response:**

The NRC disagrees that this is a new requirement. This proposed requirement was retained from the pre-existing 10 CFR 73.55(d)(5)(i)(C). However, upon consideration, the Commission concluded that current technology for badging systems have made obsolete the need for such information to be displayed visually on the badge. Therefore, this pre-existing requirement is deleted from the final rule.

**Comment Summary:**

The commenter asked why the badge must indicate the employer if the licensee is required to identify “employee” and “non-employee.” The commenter noted that this requirement does not add value.

**NRC Response:**

The Commission agrees. Upon consideration, the Commission concluded that current technology for badging systems have made obsolete the need for such information to be displayed visually on the badge. Therefore, this proposed requirement is deleted from the final rule.

**Comment Summary:**

The commenter asked why the badge must indicate “assembly area” when an individual's assembly area is subject to change as an individual's work assignment changes. The commenter noted that the badge itself could not identify this information, and this information could be stored in the security computer (and associated with the badge number). Further, the commenter noted that, even if this information is stored, it would be an excessive burden to keep up in the computer. The commenter concluded that this requirement does not add value and signage in the plant is enough. Therefore, this commenter recommended that the Commission delete provisions 10 CFR 73.55(g)(7)(ii) (A) through (E) from the final rule.

**NRC Response:**

The Commission agrees. Upon consideration, the Commission concluded that current technology for badging systems have made obsolete the need for such information to be displayed visually on the badge. Therefore, this proposed requirement is deleted from the final rule.

**Comment Summary:**

A third commenter recommended that the NRC delete 10 CFR 73.55(g)(7)(i)(E) from the final rule. The commenter stated that a non-employee who has been granted unescorted access will have completed all training necessary to be granted unescorted access which would have included their emergency assembly area or how to determine the appropriate assembly area.

**NRC Response:**

The Commission agrees. As stated above, this proposed requirement is deleted from the final rule.

**Comment Summary:**

Two commenters stated that 10 CFR 73.55(g)(8) implies that all escorts would have to be security personnel, which is not required by the current regulations or Orders. Both commenters concluded that escort training is provided in general employee training and that tracking this training through Appendix B records is not appropriate. Therefore, the commenters recommended that the NRC delete the “appendix B to this part, the approved training and



qualification plan, and” from the provision in the final rule.

**NRC Response:**

The Commission agrees. The NRC has revised 10 CFR 73.55(g)(8) to delete these references. The Commission’s expectation is that facility personnel who are assigned to perform security program duties, will be trained to perform those duties. The Commission does not require that such personnel be trained as a member of the security force, but rather that they are trained to perform the specific duties assigned to them. The Commission agrees that the intent of this requirement could be satisfied by General Employee Training or other generic site training used by the licensee for non-security facility personnel who are assigned to perform security program related duties.

**Comment Summary:**

Alternatively, one commenter recommended that the Commission should clarify the SOCs with regard to what portions of Appendix B would be applicable to escorts.

**NRC Response:**

As stated above, the Commission has revised 10 CFR 73.55(g)(8) to delete the references to Appendix B. The Commission’s expectation is that facility personnel who are assigned to perform security program duties, will be trained to perform those duties. The Commission does not require that such personnel be trained as a member of the security force, but rather that they are trained to perform the specific duties assigned to them. The intent of this requirement could be satisfied by General Employee Training or other generic site training used by the licensee for non-security facility personnel who are assigned to perform security program related duties.

**Comment Summary:**

Another commenter stated that the proposed rule allows escorts to take multiple visitors with minimal background checks into protected and VAs within nuclear power plants, but does not require that the escorts meet even minimal physical and visual capabilities. The commenter stated that, unlike the proposed new requirement the Commission seeks to add that unarmed members of the security organization meet specified physical capabilities, the proposed regulations in 10 CFR 73.55(g)(8) would not prevent licensees from assigning blind, deaf, and mute persons as escorts. The commenter urged that the regulation define minimally acceptable physical attributes for escorts.

**NRC Response:**

The Commission disagrees. The NRC requires that non-security/facility personnel performing security duties must possess the knowledge, skills, and abilities to effectively perform those duties. Therefore, where assigned duties require sight and hearing capabilities, then the escort is required to possess sight and hearing capabilities to the degree needed to perform those duties. The Commission has revised 10 CFR 73.55(d)(3) to clarify the training and qualification standards for non-security personnel implementing any part of the physical protection program.

**Comment Summary:**

A commenter stated that the proposed 10 CFR 73.55(g)(8)(i) would require escorts to have unescorted access to all areas in which they will perform escort duties. The commenter argued that this is unnecessary because to gain access to the PA or any VA, an individual first must have been given access to those areas as required elsewhere in proposed 10 CFR 73.55 and 10 CFR 73.56 regarding unescorted access (e.g., proposed 10 CFR 73.55(g)(1)(ii), (g)(1)(iii),

and (g)(2)). Therefore, the commenter recommended that the Commission delete this provision from the final rule.

**NRC Response:**

The Commission disagrees with the suggestion to delete this requirement. The Commission agrees that access authorization requirements apply to escorts consistent with this final rule. The escort must otherwise already have been authorized and granted access to the area(s) within which the individual will be performing escort duties.

**Comment Summary:**

One commenter noted that 10 CFR 73.55(g)(8)(ii) is a new requirement that is not required by the Security Orders. The commenter argued that current communications capabilities at the facilities are sufficient for escorts to make notifications or requests for assistance; therefore, the Commission should delete this provision from the final rule.

**NRC Response:**

The NRC disagrees that this is a new requirement and has determined that this requirement is a fundamental capability for all escorts and is an appropriate update to Commission regulations. The Commission agrees that all licensees should already be in compliance with this requirement and this requirement is consistent with these current licensee practices for providing communication capabilities to an escort. The term "timely" refers to the ability to call for help and complete a response to prevent radiological sabotage. The Commission has revised the final rule to provide flexibility to licensee who choose not to use the CAS/SAS to initiate a response, provided the capability to interdict and neutralize the threat is maintained.

**Comment Summary:**

Another commenter noted that the proposed 10 CFR 73.55(g)(8)(ii) would require any escort, including non-security escorts, to carry a security-radio and be specifically trained on its operations and how to properly communicate with CAS/SAS. The commenter stated that this implies that a potential threat exists which is not based on historical experience. Since visitors are required to be processed just like anyone else who enters the PA, no prohibited items would be in the visitor's possession. Therefore, no threat would exist to the facility from an authorized visitor under the escort of an authorized site worker with unescorted access. Hence, the commenter recommended that the Commission delete this provision from the final rule.

**NRC Response:**

The Commission disagrees that this requirement is invalidated simply because it has never happened, and with the assumption that a visitor can not become a threat simply because the visitor was processed through access control equipment. The Commission has determined that timely communication is necessary to ensure that the escort can summon assistance when needed and that this requirement is a fundamental physical protection program element critical to an effective physical protection program.

**Comment Summary:**

One commenter stated that continuous communication is a new requirement that is not required by the Security Orders. Therefore, the commenter recommended that the Commission delete "continuous" from this provision in the final rule.

**NRC Response:**

The NRC disagrees that this is a new requirement and has determined that this requirement is an appropriate update to the regulatory framework. The current 10 CFR 73.55(f)(1) requires security personnel to maintain continuous communication capability with CAS/SAS. The current 10 CFR 73.55(d)(4) requires vehicles, to be escorted by security personnel while inside the PA. The amended 10 CFR 73.55(g)(5)(ii) relieves the licensee from the current 10 CFR 73.55(d)(4) and allows facility personnel to escort vehicles inside the PA. In providing this relief, the Commission has determined that it is prudent to “retain” the current requirement for continuous communication capability that was present through the use of security personnel escorting vehicles. Therefore, the Commission retains this current requirement for facility personnel escorting vehicles inside the PA. This requirement does not apply to vehicles operated by authorized facility personnel.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(g)(5)(ii) would allow vehicle escorts by non-security escorts. Therefore, the proposed 10 CFR 73.55(g)(8)(iii) would require any vehicle escort, including non-security escorts, to carry a security-radio and be specifically trained on its operations and how to properly communicate with CAS/SAS. The commenter argued that that this provision implies that a potential threat exists which is not based on historical experience.

The commenter also noted that, as required by the proposed 10 CFR 73.55(g)(5)(iv), vehicles carrying hazardous materials must be escorted by an armed security officer who would have radio contact with CAS/SAS. Therefore, no threat would exist to the facility from an authorized vehicle under the escort of an authorized site worker or armed security officer with unescorted access. Hence, the commenter recommended that the Commission delete this provision from the final rule.

**NRC Response:**

As stated above, the Commission disagrees with the suggestion to delete this requirement. The Commission disagrees that this requirement is invalidated simply because it has never happened. The Commission agrees that this provision requires non-security personnel performing vehicle escort duties, to possess a capability for continuous communication and to be trained on its operations. However, the NRC has revised the final rule to provide flexibility to licensee who choose not to use the CAS/SAS to initiate a response, provided the capability interdict and neutralize the threat is maintained.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(g)(8)(iv) is a new requirement that is not required by the Security Orders. The commenter stated that the phrase “knowledgeable of those activities that are authorized to be performed within the areas” is broad and impracticable for any one escort to satisfy due to the many different operational, testing, and maintenance activities and various equipment throughout the plant.

The commenter argued that escorts should only be responsible for observing obvious indications of inappropriate behavior. Therefore, the commenter recommended that the Commission delete the phrase “within the areas for which they are assigned to perform escort duties and must also be knowledgeable of those activities that are authorized to be performed” from this provision in the final rule.

**NRC Response:**

The Commission disagrees that this is a new requirement and that this requirement is impractical. The Commission agrees that there are many different activities and equipment throughout a site and, therefore, it is appropriate for the individual assigned to perform escort duties to be knowledgeable of the activities and equipment for the area(s) in which that person will perform escort duties.

The Commission does not require the escort to be knowledgeable of everything, but rather that the individual have sufficient general knowledge to be able to identify and respond to actions that could pose a threat to the public health and safety. The Commission has revised the final rule to clarify that the level of knowledge required of an escort is general and need not be technically detailed but must be sufficient to recognize unauthorized activities and tampering by visitors.

**Comment Summary:**

Another commenter noted that the proposed 10 CFR 73.55(g)(8)(iv) would require all escorts (security and non-security) to be knowledgeable of those activities being performed by visitors. The commenter explained that, typically, visitors are brought in to perform special tasks for which they have the required knowledge not available by others on site. The escort will understand their escort duties and generally be knowledgeable of what the visitor is here to do, but will not be knowledgeable of the activity details. Therefore, the commenter argued that it would be impossible to fully comply with the proposed rule and still maintain plant operations in a manner required to protect the health and safety of the public. The commenter recommended that the Commission revise this provision by inserting "escort" before "activities" and deleting the phrase "and must also be knowledgeable of those activities that are authorized to be performed by any individual for which the escort is assigned responsibility".

**NRC Response:**

The Commission disagrees. As stated above, the Commission does not require the escort to be knowledgeable of everything, but rather that the individual have sufficient general knowledge to be able to identify and respond to actions that could pose a threat to the public health and safety. The Commission has revised the final rule to clarify that the level of knowledge required of an escort is general and need not be technically detailed but must be sufficient to recognize unauthorized activities and tampering by visitors.

**Comment Summary:**

One commenter stated that making reference to other requirements in 10 CFR 73.55(g)(8)(v) is redundant. Therefore, the commenter recommended that the NRC delete the phrase, "provided that the necessary observation and control requirements of this section can be maintained by the assigned escort over all visitor activities," from this provision in the final rule.

**NRC Response:**

The Commission agrees that the phrase, "of this section," is redundant but reference to observation and control requirements is necessary and retained. The Commission has deleted the stated deterministic ratios to allow licensees to account for site-specific conditions on a case-by-case basis provided proper observation and controls are maintained.

**Comment Summary:**

Another commenter stated that 10 CFR 73.55(g)(8)(v) would allow a single escort to take more

visitors with minimal background checks into PAs of nuclear power plants than was specified as an external assault force in the recent DBT rulemaking and would allow literally hundreds of visitors with minimal background checks to be escorted into VAs. The commenter noted several problems with this paragraph.

**NRC Response:**

The Commission has determined that the access controls presented in this rulemaking provide sufficient assurances that the licensee can maintain the capability to detect, assess, interdict, and neutralize threats that may be presented as a result of granting visitor access to the facility.

**Comment Summary:**

A commenter stated that the PA/VA distinction contradicts the approach taken to physical protection within this regulation. The commenter noted that the proposed 10 CFR 73.55(f)(1) would require licensees to document how target set equipment and elements were developed. 10 CFR 73.2 was revised to add a definition for target set. The commenter argued that the target set requirements and practices do not ensure that all target set equipment and operator actions are confined to VAs, thus some may reside in the non-vital portions of the PAs. The commenter stated that this regulation must limit the number of visitors that escorts take into areas containing target set equipment when those areas are not within VAs.

**NRC Response:**

The NRC has determined that the revised final rule text in 10 CFR 73.55(f)(3) and (f)(4) appropriately address target set equipment that may not be in a VA or a PA. Visitor access to locations within the PA that contain such equipment is consistent with NRC requirements for target set equipment. Each licensee is required to identify and protect target set equipment. It is important to note that it is a complete target set that must be protected and not the individual components that make up each target set. Therefore, the individual target set component that is located inside the PA could be lost without resulting in the loss of a complete target set. Furthermore, the comment indicated that proposed rule contained a definition for "target set", but the Commission removed this definition from the final rule, and it will be defined in regulatory guidance.

**Comment Summary:**

A commenter stated that 10 CFR 73.55(g)(8)(v) limits the number of visitors that an individual escort can take into protected and vital areas of nuclear power plants, but it does not limit the total number of visitors within VAs and PAs. The commenter stated that the regulation must limit the total number of visitors inside VAs and PAs of nuclear plants at any given time.

**NRC Response:**

The Commission disagrees. The Commission has determined that the performance-criteria to be met by the licensee must ensure that the necessary observation and control requirements of this section can be maintained by the assigned escort over all visitor activities and, therefore, is appropriate.

**Comment Summary:**

A commenter stated that the recently revised DBT regulation requires licensees to protect their facilities from radiological sabotage by up to X number of external attackers. While the Commission has not publicly stated the magnitude of X, the commenter stated that it is generally understood to be on par with the number of visitors that proposed 10

CFR 73.55(g)(8)(v) would allow an unarmed escort to take into a VA of a nuclear plant and half the number of visitors that 10 CFR 73.55(g)(8)(v) would allow an unarmed escort to take into the PA.

Unless the Force-on-Force (FOF) security exercises have demonstrated that the facility can be protected against attempted sabotage by 10 persons within the PA and 5 persons within the VA, the commenter stated that this regulation undermines the entire physical protection program.

The commenter concluded that the final rule must require armed members of the security organization escort visitors into areas of the plant containing target set equipment, prohibit visitors from entering areas of the plant containing target set equipment, and/or require periodic FOF security exercises that demonstrate the capability to prevent sabotage by 10 persons starting from within the PA and by 5 persons starting from within the VA.

**NRC Response:**

The Commission disagrees. The Commission has determined that the requirements in 10 CFR 73.55(g)(8)(v) establishes the appropriate performance-criteria relative to this concern. The Commission disagrees that armed personnel must be used to escort visitors in areas where target set equipment may be located. Each licensee is required to identify and protect target set equipment and is required to protect a complete target set, not the individual components that make up each target set. Therefore, a target set component could be lost without resulting in the loss of a complete target set. There are many options that could be taken by a licensee to contain unarmed persons as is suggested by this comment. It is the Commission's expectation that the licensee will be prepared to respond to such actions in a timely and effective manner to ensure high assurance of the public health and safety.

**Comment Summary:**

If the sabotage threat is such that an escort can take 10 visitors into PAs but only 5 visitors into VAs, the commenter said that the final rule must require measures to protect against an escort for more than 5 visitors from accessing VAs. For example, the escort's access rights could be temporarily changed in the security computer to not permit his or her access badge from opening VA doors. Or, the escort could exchange his or her permanent badge for a temporary badge that only opens doors to PAs of the plant. The commenter stated that these measures would protect against the escort accidentally leading a group of more than 5 visitors into VAs and against the visitors overwhelming their escort and using his or her badge for unauthorized entry into VAs.

**NRC Response:**

The Commission agrees in part. See the Commission response to previous comment above. Licensees are required to meet the performance-criteria established by these regulations relative to controlling the activities of visitors regardless of the site-specific visitor to escort ratios. How the licensee will control access to VAs by escorts must be described in licensee procedures and is subject to NRC inspection. It is the Commission's expectation that the licensee will be prepared to respond in a timely and effective manner to ensure high assurance of the public health and safety.

**Comment Summary:**

One commenter stated that the Commission should also take into consideration the inclusion of multiple coordinated teams. The commenter noted that attackers should be presumed to use a full range of weapons such as shaped charges, shoulder-fired rockets, mortars, anti-tank

weapons, and large quantities of explosives. The commenter concluded that the explosives, weapons and equipment need not be limited to hand-carried items as stated in current regulations.

**NRC Response:**

The Commission determined that this comment is outside the scope of this rulemaking. The NRC requires that each license provide protection against the full capabilities of the DBT adversary characteristics as defined by the Commission in 10 CFR 73.1.

**Comment Summary:**

Another commenter stated that every fuel oil delivery should be tested on-site before it is pumped into the storage tanks.

**NRC Response:**

The Commission determined that this comment is outside the scope of this rulemaking and must be addressed in site-specific procedures.

**Comment Summary:**

One commenter stated that the searches should be conducted at each barrier for those items that must be excluded beyond the barrier in order for its design function to be maintained and as necessary to prevent the introduction of items to an area that could impact effective implementation of the protective strategy. The commenter argued that search for items at any barrier that does not meet those criteria is unnecessary. Thus, the commenter recommended that the Commission revise this provision by replacing "other unauthorized materials and devices" with "other items which could be used for radiological sabotage, as required by the protective strategy."

**NRC Response:**

The Commission agrees in part. The Commission agrees that searches at any barrier must be for items consistent with the function of that barrier. Specific search criteria are identified through site-specific analysis and the measures needed must focus on the intended function of each physical barrier. The proposed rule's use of the term "unauthorized" was intended to capture this position. The Commission has revised the final rule to clarify scope and intent.

**Comment Summary:**

Another commenter referred to the following phrase in the proposed 10 CFR 73.55: "... in which the unauthorized items could be used to disable personnel, equipment and systems necessary to meet the performance objective and requirements of paragraph (b) of this section." The commenter stated that this provision would have licensees conduct individual searches with little guidance on a vague premise, open to individual interpretation, on what constitutes an item which could be used to disable personnel, equipment, and systems necessary to meet the performance objective and requirements of the proposed paragraph (b). The commenter recommended that the Commission either dictate requirements by inserting the current rule language, "or other items which could be used for radiological sabotage" or completely remove the proposed phrase.

**NRC Response:**

The Commission disagrees that this provision would have licensees conduct individual searches with little guidance on a vague premise, open to individual interpretation, on what

constitutes an item that must be searched for. The Commission has provided guidance pertaining to this requirement both before and after September 11, 2001. Therefore, the Commission disagrees with the suggested rule text change.

**Comment Summary:**

A third commenter stated that the search requirement in the proposed 10 CFR 73.55(h)(1)(i) is designed to prevent the introduction of contraband that could disable personnel, equipment, and systems necessary to accomplish the performance objective and requirements in paragraph (b). The commenter noted that paragraph (b) requires diversity and redundancy. Therefore, the commenter asked: “Is the search requirement intended to protect all components of a redundant set, or ensure that both (or more) are not disabled?”

**NRC Response:**

The Commission has revised the final rule text to clarify the scope of this requirement. The Commission does not intend that defense-in-depth be protected but rather that defense-in-depth be provided to ensure the availability of personnel, equipment, and systems, needed to prevent significant core damage and spent fuel sabotage despite the loss of any one element or component of the physical protection program.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(h)(1) adds new requirements for searches at OCA control points that are not necessary to meet the functions of the barrier at that location. The commenter stated that OCA configurations vary from facility to facility and a broad statement that requires additional search requirements above those currently in place to comply with the current security Orders is impractical and of no benefit.

The commenter said that this and other areas of the proposed rule text that attempt to address requirements at different barriers or locations in a single paragraph results in difficulty in determining the performance-based requirements at the various locations. Thus, the commenter recommended that the Commission separate the performance requirements for each location (i.e., VA, PA, and OCA).

**NRC Response:**

The Commission disagrees that this provision adds new requirements or requires measures that are beyond current requirements for any area of the facility. The Commission agrees that OCA configurations vary from facility to facility and, as intended in the proposed rule, the specific searches and criteria to be applied must be site specific. For this reason the proposed rule referenced the approved security plans in which this site-specific information must be described. However, to clarify the scope of this requirement, the Commission has revised the final rule to specify that searches must satisfy the physical protection program design requirements and intended function of the barrier at which they are applied.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(h)(1) could be interpreted as requiring licensees to conduct individual searches at OCA turnstiles and all other OCA control points. The commenter argued that this is a substantial increase in manpower and equipment requirements and exceeds all existing requirements. Thus, the commenter recommended that the Commission remove this requirement for the OCA control points under 10 CFR 73.55(h)(1),



with the exception of vehicle control points. The commenter stated that vehicle control points should only be required to conduct DBT threat searches as required. Thus, the commenter recommended that the NRC delete the phrase “the requirements of this section” from the final rule, which would prevent any misinterpretation that person or prohibitive item searches must also be performed at the OCA control points.

**NRC Response:**

The Commission disagrees that this provision adds new requirements or requires measures that are beyond current requirements for any area of the facility. The Commission agrees that OCA configurations vary from facility to facility and, as intended in the proposed rule, the specific searches and criteria to be applied must be site specific. For this reason the proposed rule referenced the approved security plans in which this site-specific information must be described. However, to clarify the scope of this requirement, the Commission has revised the final rule to specify that searches must satisfy the physical protection program design requirements and intended function of the barrier at which they are applied.

**Comment Summary:**

A third commenter stated that searching personnel, vehicles, and packages at the OCA is useless unless a means is established to ensure that, after the search, the individual cannot acquire something that would have been subject to confiscation at the search point. The commenter noted that traveling through the OCA, an area that is currently not required to have a 100 percent denial barrier and intrusion monitoring system, would allow the searched individual to acquire contraband, making the search at the OCA checkpoint useless, but expensive.

**NRC Response:**

The Commission agrees that licensees are not required to apply a 100 percent denial into the OCA as is required of the PA. This rulemaking clearly requires a licensee to analyze site-specific conditions to determine what materials must be prevented from access into facility areas because they can be used to commit radiological sabotage from those areas. Where a barrier is established it must perform a specific function and designated access portals are established to allow access consistent with that function. Items that do not pose a threat from within the OCA need not be searched for.

**Comment Summary:**

Another commenter noted that the access control points into restricted areas other than the OCA and PA would not be subject to the requirements of proposed 10 CFR 73.55 (h)(1). The commenter recommended that the NRC replace “...into the owner controlled area and protected area...” with “...into the owner controlled area, the protected area, and other restricted areas...”

**NRC Response:**

The Commission disagrees. The intent of this requirement is to prevent the access of materials or items that can be used to commit radiological sabotage from that area. Nuclear power plants consist of an owner controlled area, protected area, and vital areas. Therefore, reference to "other" restricted areas is not applicable to power reactors.

**Comment Summary:**

One commenter stated that the Commission should establish procedures that define a search process with the objective of preventing access of unauthorized personnel or materials beyond the barrier that it was designed to prevent.

**NRC Response:**

The Commission disagrees. The Commission agrees that all searches, at any barrier, must be consistent with the function to be performed by the barrier at which the search is conducted. However, the Commission disagrees that it is the Commission's responsibility to establish "procedures" that define the search process.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(h)(2), (h)(2)(i), and (h)(2)(ii) are too general, and could be misinterpreted as requiring personnel search at the OCA for prohibited items. Thus, the commenter recommended that the Commission revise this provision by adding the phrase "as required in the Commission-approved security plans" to the end of the provision.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to require that the licensee implement search procedures at OCA access portals. It is the responsibility of the licensee to conduct a site-specific analysis to determine if these searches will apply only to vehicles or must include personnel searches to support the physical protection program.

**Comment Summary:**

A commenter stated that the Commission should clarify that the 10 CFR 73.55(h)(6) criteria applies to PA entry searches. The commenter concluded that searches at other barriers are conducted in a manner to detect those items that are not permitted beyond the barrier.

**NRC Response:**

The Commission disagrees. The Commission has concluded that vehicle areas to be searched are applicable to both the OCA and PA vehicle search procedures. The Commission has revised the final rule in 10 CFR 73.55(h)(2)(ii) to generically require that the licensee describe in written procedures, the vehicle areas to be searched and items to be searched for at vehicle access portals.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(h) is a new requirement if it is intended to be applied to PA entry searches. Further, if this provision is only applied to the current Order requirements, the commenter recommended that the NRC clarify this in the final rule.

**NRC Response:**

The Commission disagrees. This requirement was intended to be generic to both PA and OCA vehicle searches. The NRC has revised the final rule in 10 CFR 73.55(h)(2) for OCA searches and in (h)(3) for protected area searches to more prescriptively establish these requirements. It is important to note that PA searches are commonly observed via video surveillance monitored by CAS/SAS and the armed response is provided by the armed responders inside the PA at all times.

**Comment Summary:**

Another commenter asked if either security officer at the vehicle search point is required to have a weapon. The commenter noted that the provision does not specify this.

**NRC Response:**

The OCA vehicle checkpoint must have an armed response capability. The Commission has revised the final rule to prescriptively require an armed person at the OCA vehicle checkpoint.

**Comment Summary:**

Referencing this provision as well as proposed 10 CFR 73.55(h)(1) and 10 CFR 73.55(h)(1)(i), one commenter stated that the rule text appears to require the use of both electronic search equipment and physical searches at every area. The commenter argued that either the electronic search or the physical search is acceptable, and the use of the phrase “or other unauthorized materials and devices” is too broad. The commenter stated that the searches should be for unauthorized materials, which if allowed beyond that barrier, could be utilized to disable personnel, equipment, and systems necessary to prevent an act of radiological sabotage that results in significant core damage. Also, the commenter stated that the ability to detect with electronic means any newly developed technology is unrealistic. The commenter concluded by stating that the words “as needed” do not sufficiently qualify the statement.

**NRC Response:**

The Commission agrees in part. The Commission does not intend that each and every search must be conducted by both equipment and by personnel, but rather that searches by personnel be used when the equipment search is not adequate or cannot positively identify a given item and when a suspicious item is detected. The Commission agrees that searches must focus on items that present a threat. Specific methodologies to be used are specific to the type of search being conducted.

The NRC agrees in part with the comment that the ability to detect with electronic means any newly developed technology is unrealistic. Consistent with the proposed rule SOCs, the reference to future technological advancements was intended to be generic and focused on "other unauthorized materials and devices". The Commission's intent was to generically account for future technological advancements that the Commission may attribute to the DBT at a future time. The Commission concluded that use of the phrase "items which could be used to commit radiological sabotage" as used in the final rule 10 CFR 73.55(h)(1) appropriately addresses this intent and has deleted the phrase "or other unauthorized materials and devices" from this requirement of the final rule.

**Comment Summary:**

A commenter stated that the Commission should clarify that the proposed 10 CFR 73.55(h)(6) applies only to the checkpoint established in the OCA. The commenter concluded that applying this requirement to other vehicle search processes is a new requirement that would exceed the Order requirements.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to require video equipment at the OCA vehicle search area that is monitored by an individual who can initiate a response if needed. It is important to note that the proposed rule intended to be consistent with the current licensee practice of observing PA searches through video equipment monitored by individuals in the CAS/SAS.

**Comment Summary:**

A commenter stated that the proposed rule does not close a dangerous loophole in current search requirements for law enforcement personnel and security officers. The commenter

noted that the current rule at 10 CFR 73.55(d)(1) states that, “The licensee shall control all points of personnel and vehicle access into a protected area ....” The licensee shall subject all persons except bona fide Federal, State, and local law enforcement personnel on official duty to these equipment searches upon entry to a protected area. Armed security guards who are on duty and have exited the protected area may reenter the protected area without being searched for firearms.”

The commenter stated that proposed 10 CFR 73.55(g)(1) no longer specifically authorizes these exceptions to the search procedures, but would still allow them, subject to Commission review and approval. The commenter argued that such exceptions could provide insiders or corrupt law enforcement personnel collaborating with adversaries with significant opportunities to introduce contraband, silencers, ammunition or other unauthorized equipment that could be used in an attack. The commenter stated that this practice should be explicitly forbidden in the rules except under extraordinary circumstances, as approved by the Commission.

**NRC Response:**

The Commission disagrees. The proposed rule omitted these pre-existing requirements and generically required them to be addressed by the licensee in security plans. The specific provisions addressed by this comment are retained in the final rule from the pre-existing rule. The Commission has determined that retention of these requirements is appropriate and are consistent with NRC requirements for background checks, psychological assessments, and behavior observation (trustworthiness and reliability). It must be noted that armed security personnel are searched prior to reporting for duty and being issued a firearm. This provision simply allows armed personnel to exit the PA with their assigned weapon, to perform official duties and then re-enter without re-search for a firearm that has been issued to them.

With respect to bona fide Federal, State, and local law enforcement personnel on official duty, they are subject to their own trustworthiness and reliability determinations which are outside the scope of this rulemaking. It is important to note that this flexibility does not relieve the licensee of its responsibility to prevent the introduction of unauthorized items or materials that would otherwise be prevented from access and only applies to those weapons or items that are “issued to designated armed personnel in the performance of “official duties”.

**Comment Summary:**

One commenter stated that the Commission should add a definition of unauthorized materials in 10 CFR 73.2 to clarify that unauthorized materials are materials that are prohibited from entry for the purposes of protection against radiological sabotage. The commenter stated that this is another example of the need to clarify that the search process at different barriers is intended to search for different materials in accordance with the intent of the barrier.

**NRC Response:**

The Commission disagrees that "unauthorized materials" requires a definition in 10 CFR 73.2. The Commission has revised the final rule to clarify the types of items that are not authorized access through a given barrier are ones that the licensee has concluded, subject to NRC inspection, can be used to commit radiological sabotage if allowed beyond the barrier.

**Comment Summary:**

A commenter stated that the NRC should clarify that the proposed 10 CFR 73.55(h)(7) applies to PA entry searches. The commenter concluded that searches at other barriers are conducted in a manner to detect those items that are not permitted beyond the barrier.

**NRC Response:**

The Commission agrees. The Commission has revised the final rule to address PA searches individually and more prescriptively.

**Comment Summary:**

One commenter stated that the Commission should retain the current rule language in 10 CFR 73.55(d)(1) and (d)(4). The commenter noted that the current security plans provide for the controls necessary to ensure that emergency response personnel and vehicles are bonafide members and equipment are identified and appropriately allowed access. The commenter argued that to require individual approval of exceptions is unreasonable and unnecessary, and this is a new requirement that exceeds the Order requirements.

**NRC Response:**

The Commission agrees in part. The Commission disagrees that pre-existing rule text should be used but agrees that current NRC-approved security plans address this requirement. The Commission has revised the final rule to clarify the scope of this requirement, provide necessary flexibility, and ensure consistency with current practices. The Commission agrees that a specific list of exempted items in the security plans is an unnecessary regulatory burden and has revised the final rule to allow a more generic description of the types of items that may be exempted to be included in the security plans, with specific details being addressed in licensee procedures.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(h)(8) would require extensive security plan and procedure changes for language which is already clear in the current rule. The commenter argued that this proposed change puts the licensee liable for dictating rules that may be counter to state and local law enforcement policies and raises issues of constitutionality. The commenter concluded that the current rule language is clear and is identified in station procedures; thus, the Commission should reinsert the current rule language.

**NRC Response:**

The Commission disagrees that pre-existing rule text should be used but has determined that the current NRC-approved security plans address this requirement. The Commission has revised the final rule to clarify the scope of this requirement, provide necessary flexibility, and ensure consistency with current practices.

**Comment Summary:**

A third commenter stated that this paragraph notes that exceptions to the search requirements “must be submitted to the Commission for prior review.” The commenter asked: “does this apply only to exceptions in the initial plan submitted to the NRC pursuant to the revised 10 CFR 73.55, or to all subsequent changes?” If it is the latter, the commenter asked: “why are search requirements held to a higher standard of Federal regulatory review (i.e., requiring prior approval) than other requirements in 10 CFR 73.55?”

**NRC Response:**

The Commission has determined that the current NRC-approved security plans address this requirement. The Commission has revised the final rule to clarify the scope of this requirement, provide necessary flexibility, and ensure consistency with current practices.

**Comment Summary:**

In the proposed 10 CFR 73.55(h)(8)(iii), one commenter stated that the NRC should insert “to the extent practicable” after “receiving area.”

**NRC Response:**

The Commission agrees. The phrase "to the extent possible" is added.

**Comment Summary:**

Another commenter stated that the Commission should modify proposed 10 CFR 73.55(h)(8)(iii) to clarify that the material is to be searched to the extent practicable, similar to proposed 10 CFR 73.55(h)(8)(ii). Thus, the commenter recommended that the Commission add the phrase “to the extent practicable” after “searched.”

**NRC Response:**

The Commission has revised the final rule to clarify the scope of this requirement, provide necessary flexibility, and ensure consistency with current practices.

**Comment Summary:**

One commenter stated that the Commission should clarify proposed 10 CFR 73.55(h)(8)(i) to state that it only applies to the PA.

**NRC Response:**

The NRC agrees and has revised the final rule, in 10 CFR 73.55(h)(3)(vii), to specify that this requirement applies only to bulk items that are exempted from protected area search requirements.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(h)(8)(i) would require an armed escort for all material exempted from search. However, the commenter argued that this is not appropriate for “all” such materials. The commenter noted that NUREG-0908, “Acceptance Criteria for the Evaluation of Nuclear Power Reactor Security Plans,” provided the acceptable guidance for meeting the existing 10 CFR 73.55(d)(3) search requirements. Licensees have constructed their search processes in accordance with this guidance which only requires security officer escort for Category I and II material. Whereas, Category III material must be positively controlled; e.g., stored in a locked area controlled by a person familiar with the material, and Category IV material must be stored in a locked area and opened under the supervision of persons familiar with their content.

Therefore, the commenter argued that not all material exempted from search is required to be escorted by a security officer. As such, there is no threat evidence that support the proposed new 10 CFR 73.55(h)(8)(i) requirement to have Category I through IV material escorted within the PA by an armed security officer. The commenter recommended that the Commission revise this provision by replacing “...escorted by an armed individual who is trained and equipped to observe offloading and perform search activities at the final destination within the protected area” with “...controlled as described in the Commission-approved security plan for admittance into the protected area.

**NRC Response:**

The Commission agrees in part. The Commission agrees that the procedural details provided by the commenter regarding Cat I through IV materials are applicable, however, in the case of

bulk materials, an armed escort is required until the absence of contraband can be verified. The NRC disagrees with the recommended rule text change because Commission requirements are described in this final rule, not in the licensee security plan. Licensee security plans describe how the licensee will satisfy Commission requirements.

**Comment Summary:**

One commenter stated that 10 CFR 73.55(h)(1)(iii) is not specific enough regarding search observation requirements. Thus, the commenter recommended that the Commission revise the provision to state: "...and responsibilities required to satisfy the 10 CFR 73.55(h)(7) vehicle search observation requirements."

**NRC Response:**

The Commission agrees in part. This proposed requirement is deleted from the final rule because this requirement is adequately addressed in 10 CFR 73, Appendix B and need not be repeated here.

**Comment Summary:**

Another commenter asked if the qualifications of search personnel are spelled-out somewhere.

**NRC Response:**

This proposed requirement is deleted from the final rule because this requirement is adequately addressed in 10 CFR 73, Appendix B and need not be repeated here.

**Comment Summary:**

Regarding proposed 10 CFR 73.55(h)(2)(i), one commenter stated that this provision would restrict entry of "prohibited" items versus "contraband." The commenter noted that both the current and proposed Part 73, Appendix B and Appendix G utilize the term "contraband" when referring to detection training and reportability of such material's entry into a controlled area.

The commenter also noted that contraband is defined as "Any illegal item to include unauthorized weapons, explosives, incendiary devices, and other devices or items that could be used to provide significant assistance in an act of radiological sabotage or personnel injury." The commenter recommended that the NRC revise this provision replacing "a prohibited item" with "contraband."

**NRC Response:**

This proposed requirement is deleted from the final rule because it is adequately addressed in the final rule in 10 CFR 73.55(h)(1).

**Comment Summary:**

Regarding proposed 10 CFR 73.55(h)(2)(ii), the same commenter stated that the provision and associated SOCs could be interpreted as not allowing the use of technology, such as the Itemizer, to assist in the search process once the fixed search train equipment alarms. Thus, the commenter recommended that the Commission replace the term "fixed" with "fixed or portable."

**NRC Response:**

The Commission disagrees. This requirement is deleted from the final rule because this requirement is adequately addressed in 10 CFR 73.55(h)(3)(i).

**Comment Summary:**

One commenter stated that 10 CFR 73.55(i) seems to be unnecessarily complicated by attempting to address new plant construction and currently operating facilities. The commenter argued that requirements for new plants should be separated or each requirement should be identified with exceptions that apply to currently operating facilities. The commenter noted that the requirements for dual, redundant equipment and capabilities for alarm stations is a new requirement that is more stringent than the Order requirements and would result in a significant impact on currently operating facilities. The commenter argued that the proposed language does not consider the various designs currently in use that provide adequate capabilities to effectively implement the protective strategy. The commenter concluded that these new requirements should be bifurcated from the final rule and addressed in separate rulemaking.

**NRC Response:**

The Commission agrees in part. The proposed rule attempted to address new reactor construction in the proposed 10 CFR 73.55(a)(5) and (6) and pre-existing reactors in the proposed 10 CFR 73.55(i). To clarify which requirements apply to new reactors and which requirements apply to pre-existing reactors, the Commission generically addresses the new reactor requirements in the final rule in 10 CFR 73.55(a)(6) and specifically requires dual and redundant CAS/SAS for new reactors in the final rule in 10 CFR 73.55(i)(4)(iii). The pre-existing requirement 10 CFR 73.55(e)(1) for protection CAS/SAS against a single act is addressed in the final rule in 10 CFR 73.55(i)(4)(i). The Commission disagrees that requirements for new reactors should be addressed in a separate rulemaking.

**Comment Summary:**

One commenter stated that the Commission should revise 10 CFR 73.55(i)(1) by replacing “early detection” with “detection and assessment of unauthorized persons and activities at a location or time that facilitates the effective implementation of the protective strategy.” Also, the commenter recommended that the term “all threats” in the SOC’s should be bounded by the DBT. Also, the commenter suggested that the Commission avoid the term “time lines” in the SOC’s, as it has specific connotations for industry that does not apply in this case. Lastly, the commenter recommended that the Commission replace “beginning at the time of failure” with “beginning at the time of discovery” in the SOC.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to delete the phrase “early detection.” The Commission agrees that the term “all threats” as used in the proposed rule SOC’s is bounded by the DBT as stated in 10 CFR 73.1. The Commission agrees that the term “time-lines” as used in the proposed rule SOC’s does not have the same meaning as when this term is used in relation to contingency response. However, the Commission disagrees with the suggestion to replace the phrase “beginning at the time of failure” with “beginning at the time of discovery” in the SOC’s because the statement is inconsistent with the pre-existing 10 CFR 73.55(e)(2) which requires that an indication of an IDS failure be automatically provided.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(i)(1) implies that an early warning system would be required beyond the required PA intrusion detection systems. The commenter said that is unclear as to what the phrase “early detection and assessment” was meant to imply. In addition, the commenter stated that proposed 10 CFR 73.55(i)(1) uses the phrase “at all times,” which means that anytime a PA IDS segment fails, the licensee is in violation of the rule. Thus, the commenter recommended that the Commission modify the provision to state:



“The licensee shall establish and maintain a protected area intrusion detection and assessment system that provides the capability for detection and assessment of unauthorized persons and activities in accordance with the Commission-approved security plan.”

**NRC Response:**

The Commission agrees in part. The Commission has deleted the phrase “early detection” from the final rule. The Commission disagrees that the phrase “at all times” would not allow for equipment failures as such failure is addressed in other paragraphs of this rule. The NRC disagrees with the suggested rule text because Commission requirements are stated in the regulations, not approved security plans.

**Comment Summary:**

One commenter stated 10 CFR 73.55(i)(2), while requiring that both CAS and SAS have alarm and video equipment, allows that “at least one” (i.e., not both) must be protected in accordance with (e)(6)(v), (e)(7)(iii), and (i)(8)(ii). The commenter stated that the phrase “at least one” appears to offer some relief from the requirement in proposed 10 CFR 73.55(a)(6) that CAS and SAS be equipped to equivalent standards, and to 10 CFR 73.55(a)(6)(ii) requiring equivalent capabilities of detection. The commenter asked if this paragraph is regulatory relief from those sections.

**NRC Response:**

The Commission agrees. The requirements in the proposed 10 CFR 73.55(a)(6) apply to future reactors only and do not apply to pre-existing reactors.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(i)(10)(ii)(A) applies new requirements not prescribed by either the current rule or NRC Orders. The commenter noted that OCA checkpoint over watch is only required from one alarm station, but the proposed rule would require both alarm stations to remotely monitor the OCA checkpoint. Thus, the commenter recommended that the Commission insert “as required in the Commission-approved security plan” after “alarm stations.” The commenter stated that this revision would require the licensee to look at the security plan to understand what CCTV systems are required to be monitored from both alarm stations versus just one.

**NRC Response:**

This proposed requirement is subsumed in the final rule in 10 CFR 73.55(i)(2). The NRC disagrees that this is a new requirement and has determined that it is an appropriate update to Commission regulations relative to the pre-existing 10 CFR 73.55(e)(1) for CAS/SAS and current licensee practices. This requirement does not pertain to the OCA over watch referenced by the commenter. The Commission disagrees with the proposed rule text change because the NRC requirements are stated in the regulations and not licensee security plans.

**Comment Summary:**

Another commenter, referring to proposed 10 CFR 73.55(i)(10)(ii)(A) and (ii)(B), stated that displaying video technology concurrently at both alarm stations is not consistent with current practice, which is based on requirements delineated in the February 2002 ICM Order (the Order allows display in several other areas in lieu of the alarm stations).

**NRC Response:**

The Commission agrees in part. The commenter is referring to specific observation

requirements that may be performed outside the CAS/SAS. This requirement relates to only CAS/SAS functions. The Commission has revised the final rule to be consistent with current licensee practices and to clarify that this requirement focuses on assessment. Therefore, the Commission has deleted reference to observation, monitoring, and surveillance.

**Comment Summary:**

One commenter recommended that the NRC revise 10 CFR 73.55(i)(10)(ii)(C), replacing “detected activity” with “to protected area alarm annunciation.”

**NRC Response:**

The Commission disagrees. The phrase “detected activity” accurately represents the performance-criteria of this requirement and focuses on the assessment of the cause of the alarm, not on the annunciation itself. An alarm annunciation is not assessed, it is the detected activity/cause of the alarm annunciation that is assessed.

**Comment Summary:**

Another commenter noted that 10 CFR 73.55(i)(10)(ii)(C) requires video technology capable of making positive recognition of activity. The commenter asked what standards exist for judging the positive recognition and will the Commission be satisfied with the video operator’s judgment?

**NRC Response:**

The Commission agrees that assessment is performed by people and that video technology is a tool, therefore, operator judgment is a component of the assessment process. The Commission has provided guidance in this area and compliance with this requirement is subject to NRC inspection and force-on-force testing.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(i)(4)(ii) is a significant, high-impact change that exceeds the requirements of the security Orders. The commenter noted that the exact scope and impact of the requirements cannot be assessed with the current language. Thus, the commenter suggested that the Commission bifurcate this requirement from the final rule, assessed for practicality and benefit, and addressed, if appropriate, in separate rulemaking.

**NRC Response:**

The Commission agrees in part. The NRC disagrees that this requirement is a significant, high impact change and with the suggestion to bifurcate this requirement from the final rule. However, the Commission agrees that the scope of this requirement must be clarified. The proposed rule unintentionally required that uninterruptible power sources (UPS) for intrusion detection systems (IDS) and assessment equipment be protected as a vital area.

The NRC intended to require only that UPS be required for IDS and assessment equipment at the PA perimeter and not to require that UPS be protected as a vital area. Therefore, the NRC has revised the final rule in 10 CFR 73.55(e)(9)(vi)(A) to retain the pre-existing requirement to protect the secondary power supply for “alarm annunciation equipment” as a vital area and has moved the requirement for UPS for IDS and assessment equipment at the PA perimeter to the final rule in 10 CFR 73.55(i)(3)(vii) as a design feature for the IDS and assessment equipment such that UPS need not be protected as a vital area.

**Comment Summary:**

Another commenter stated that requiring a UPS for all alarm station functions including assessment is impractical. The commenter stated that high mast lighting could reasonably be interpreted to be required for assessment, and a UPS capable of maintaining the high mast lighting system would be burdensome and is not justified based on the results from FOF inspections performed by the NRC.

**NRC Response:**

The Commission agrees in part. The NRC agrees that not all IDS equipment and video equipment used by a licensee is required to ensure detection, assessment, and response. It is the Commission's expectation that each licensee will provide UPS for IDS and assessment equipment at the PA perimeter. If the effectiveness of assessment at the PA perimeter or within the protective strategy depends on high mast lighting, then the UPS or other methodology, such as low-light technology would be required for adequate protection between the time of loss of offsite power and when secondary power takes over.

**Comment Summary:**

One commenter stated that the Commission should replace the terms "significant core damage" and "spent fuel sabotage" with the term "radiological sabotage" because "radiological sabotage" is a defined term in 10 CFR 73.2 and the other terms are not.

**NRC Response:**

The Commission agrees in part. The NRC agrees that alarm stations do not prevent significant core damage and spent fuel sabotage, and therefore, the Commission has deleted reference to significant core damage and spent fuel sabotage from this final rule requirement.

**Comment Summary:**

Another commenter stated that the proposed text could be interpreted as requiring identical equipment in both the CAS and SAS, which is not required for defense-in-depth and would exceed the requirements of the security Orders. The commenter argued that this is a significant, high-impact change that exceeds the requirements of the Security Orders, whose exact scope and impact cannot be assessed with the current language. The commenter recommended that the NRC bifurcate this provision from the final rule, assessed for practicality and benefit, and addressed, if appropriate, in a separate rulemaking.

**NRC Response:**

The Commission disagrees that this requirement would necessitate identical equipment in both the CAS and SAS and disagrees with the suggestion to bifurcate this requirement from the final rule.

**Comment Summary:**

One commenter noted that the Commission uses the term "equivalent capabilities" in proposed 10 CFR 73.55(a)(6)(ii) and the term "functionally equivalent capabilities" in proposed 10 CFR 73.55 (i)(4). The commenter stated that at the March 9, 2007, public meeting the NRC clarified that the intent is that sites need to be able to carry out the functions as described in their plans from either alarm station and it can use various types of equipment. Further, the commenter noted that the NRC agreed that "functionally equivalent" applies only to the items listed in proposed 10 CFR 73.55(i)(4) and that those capabilities need to be accomplished functionally from either the alarm station.

The commenter stated that the terms “equivalent” and “functionally equivalent” as described in the SOCs appear to conflict with the description provided in proposed 10 CFR 73.55(a)(6)(ii). The commenter argued that “functionally equivalent” should not require that the alarm stations be “equally equipped.” The commenter noted that the ambiguous language appears to require that assessment, monitoring, observation, and surveillance capabilities currently performed locally must be incorporated into the alarm stations. Thus, the commenter recommended that the Commission modify the proposed 10 CFR 73.55(i)(4), at a minimum, by using the term “functionally equivalent.”

**NRC Response:**

The Commission agrees in part. The requirements of the proposed 10 CFR 73.55(a)(6) would have applied to future reactors only and the proposed 10 CFR 73.55(i)(4) to pre-existing reactors. The Commission agrees that pre-existing CAS/SAS need only perform the same functions required by the NRC to survive a single act, whereas, new reactors must be constructed to CAS standards and equally equipped (i.e., redundant). The Commission does not intend to require identical equipment (make, model, serial#, etc.) to be retrofitted in pre-existing CAS/SAS, but rather that whatever equipment is used in either CAS or SAS must be “capable” of performing the same functions for detection, assessment, and communications, that are required to survive a single act and effectively implement the protective strategy. The Commission has revised the final rule to clarify this scope and has deleted the proposed term “functionally equivalent.”

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(i)(4) would require extensive changes in equipment and the alarm station structures for existing licensee facilities. The commenter noted that in most configurations the primary alarm station also contains, in or nearby, the security computer, which if the primary alarm station is taken out, then redundancy to the other station may be jeopardized. The commenter said that because of the location of the primary alarm station, if it was taken out, the full security protective strategy would have failed and the plant would have more major concerns than redundancy of the alarm stations. Thus, the commenter recommended that the Commission remove the phrase “and the licensee protective strategy in the event that either alarm station is disabled” in the last sentence of proposed 10 CFR 73.55(i)(4).

**NRC Response:**

The Commission disagrees. This requirement is retained from the pre-existing 10 CFR 73.55(e)(1) for protection of CAS or SAS from a single act and updates that requirement consistent with the survivability of the functions performed in the CAS and SAS to support the site protective strategy.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(i)(4)(i) and associated SOCs apply a new expectation for preventing single point failure of security systems that were never designed to such standards. The commenter indicated significant design changes would be required before full compliance could be achieved. The commenter stated that these proposed sections prescriptively require complete duplication of capabilities in the two alarm stations, by separate and redundant detection and assessment systems having no common equipment locations. The commenter argued that such duplication would require extensive backfitting at many facilities despite being unnecessary to ensure an effective protective strategy. Thus, the

commenter recommended that the Commission should revise the provision and SOC to be performance-based rather than prescriptive for robustness of security capabilities.

The commenter suggested the following wording for the proposed 10 CFR 73.55(i)(4)(i): “The licensee shall ensure that a single act cannot remove the capability to respond to an alarm, summon offsite assistance, implement the protective strategy, provide command and control, or otherwise prevent significant core damage and spent fuel sabotage.”

**NRC Response:**

The Commission disagrees. The pre-existing 10 CFR 73.55(e)(1) requires that either CAS or SAS survive a single act. The Commission disagrees that these proposed sections prescriptively require complete duplication of capabilities in both alarm stations except for new reactors as stated in the final rule in 10 CFR 73.55(i)(4)(iii). The Commission has determined that this requirement is consistent with the current 10 CFR 73.55(e)(1) and is consistent with the Commission expectations regarding the functions that must be able to be performed by both alarm stations.

**Comment Summary:**

At the November 29, 2006, public meeting, one commenter asked if the term “a single act” is within the confines of the DBT.

**NRC Response:**

The NRC responded that “a single act” is “absolutely bounded by the DBT.” The NRC explained that an important piece of that is the concept of “functionally equivalent.” The concept is that no single act would likely takeout the ability to implement the plan by removing both of the security systems.

**Comment Summary:**

One commenter stated that the Commission should clarify in the SOCs that CAS and SAS operators will not be responsible for monitoring cyber intrusion detection systems for computer networks that are not physical protection detection and assessment systems.

**NRC Response:**

The Commission disagrees. It is a licensee choice as to whom to assign such duties and responsibilities.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(i)(8)(v) appears to be unusually prescriptive for a performance-based regulation. The commenter requested that the Commission comment on this issue.

**NRC Response:**

The Commission disagrees that this requirement is overly prescriptive. The Commission has determined that this requirement is necessary to address lessons learned from implementation of current NRC requirements and establishes performance-criteria relative to alarm station operator actions and the ability of both CAS and SAS to perform required functions.

**Comment Summary:**

A third commenter stated that proposed 10 CFR 73.55(i)(8)(v) implies that implementing procedures will ensure that alarm station operators have the required knowledge. The

commenter stated that this is not possible. The commenter noted that, as indicated in proposed 10 CFR 73.55 (c)(6)(i), implementing procedures simply describe the duties and responsibilities of the alarm station operators. Thus, the commenter suggested that the Commission delete the term “implementing procedures” from this provision in the final rule. Also, the commenter stated that the Commission should clarify that this provision applies to alarms for physical intrusion detection only and does not include cyber intrusion detection.

**NRC Response:**

The Commission disagrees that this provision should not include cyber security. It is a licensee choice as to whom to assign such duties and responsibilities. The Commission disagrees that implementing procedures cannot ensure that both operators gain the required knowledge. The Commission has determined that it is through the performance of the actions described in implementing procedures that alarm station operators acquire this knowledge.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(a)(6)(i) requires that the CAS and the SAS comply with 10 CFR 73.55(e)(7)(iii), which specifically references the CAS but is silent on the SAS. The commenter asked how this requirement can hold for the SAS if the paragraph included by reference specifically omits the SAS.

**NRC Response:**

This requirement is applicable to only new reactors and is intended to require that both the central and secondary alarm stations be entirely redundant. The Commission does not intend to apply this requirement at pre-existing reactors unless, that licensee chooses to construct a new reactor inside the existing protected area. In such cases, the new reactor requirements apply.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(a)(6)(ii) appears to be misplaced and would be more appropriate for section (i).

**NRC Response:**

The Commission agrees. The Commission has revised the final rule to move this requirement to 73.55(i)(4)(iii).

**Comment Summary:**

A commenter stated that the requirement for the equipment to remain operational under all conditions other than “abnormal or severe weather” is not an achievable objective. The commenter stated that conditions that may be considered “normal” for various seasons at a facility may impact on any known technology. Compensatory measures are initiated until the condition is corrected.”

**NRC Response:**

The Commission disagrees. The Commission has revised the final rule to delete this requirement because it is redundant to the final rule in 10 CFR 73.55(n)(1)(i). The NRC disagrees that this requirement is not an achievable objective. Pre-existing requirements state that each licensee is responsible to maintain physical security equipment in operable condition. The Commission's expectation is that each licensee will account for the effects that site-specific conditions will have on equipment and, thereby, choose equipment that is appropriate for those

conditions.

**Comment Summary:**

One commenter recommended that the Commission revise the provision to replace “provides early detection and assessment of unauthorized activities” with “effectively implements the site protective strategy.”

**NRC Response:**

The Commission agrees. The Commission has revised the final rule to delete the term "early detection" and to clarify that these capabilities focus on the design requirements of 10 CFR 73.55(b), to identify indications of tampering or otherwise implement the site protective strategy.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(i)(9)(i) and (ii) imply that each licensee must have some form of early warning systems. Thus, the commenter recommended that the NRC remove the word “early” in both 10 CFR 73.55(i)(9)(i) and (ii).

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to delete the term "early detection" and to clarify that these capabilities focus on the design requirements of 10 CFR 73.55(b), to identify indications of tampering or otherwise implement the site protective strategy.

**Comment Summary:**

One commenter noted that in the approved security plan template (NEI 03-12), the concept of “continual” surveillance does not apply to the VA or PA and surveillance of these areas is on a frequency of “once per shift.” Absent further explanation, the commenter stated that it is difficult to understand the basis for this requirement. The commenter stated that if it is the Commission’s intent to have the same surveillance and monitoring for the OCA, PA, and VA then a basis is needed. Otherwise, the commenter recommended that the Commission delineate the requirements of each of the three areas in the final rule. Further, the commenter stated that surveillance and monitoring programs are designed to ensure that the site protective strategy is effectively implemented, not necessarily for the detection of unauthorized activities. Lastly, the commenter asked for the basis for the requirement to “ensure the integrity of physical barriers or other components?”

**NRC Response:**

The Commission agrees in part. The NRC has revised the final rule to specify continuous surveillance, observation, and monitoring requirements for the OCA. The Commission agrees that surveillance and monitoring programs serve multiple purposes and has revised the final rule to delete reference to the detection of unauthorized activities. The regulatory basis for the requirement to “ensure the integrity of physical barriers or other components is found in the pre-existing rule in 10 CFR 73.55(g)(1) and in the final rule in 10 CFR 73.55(n)(1), which require the licensee to maintain all security related equipment, to include physical barriers, in an operable condition to ensure that the function required of the equipment or barrier can be performed, for which the term "integrity" is used.

**Comment Summary:**

Another commenter noted that the proposed 10 CFR 73.55(i)(9)(ii) requires continual surveillance, observation, and monitoring “of all areas identified in the approved security plans as requiring surveillance, observation, and monitoring.” The commenter asked: What if the licensee doesn't identify any such areas?” The commenter stated that there does not appear to be a requirement to do so.

**NRC Response:**

The Commission has revised the final rule to specify applicability to only the OCA. The proposed rule attempted to address this requirement such that affected areas must be identified through site-specific analysis. Areas identified or not identified by the licensee through site-specific analysis are subject to inspection and force-on-force testing.

**Comment Summary:**

One commenter noted that the NRC Orders did not include a requirement to monitor or conduct surveillance of unattended openings. The commenter argued that 10 CFR 73.55(i)(9)(iv) is redundant with the proposed 10 CFR 73.55(e)(6)(i), (e)(10), and (e)(8)(vi), which discuss surveillance of different barriers. Therefore, the commenter recommended that the Commission delete this requirement from the final rule.

**NRC Response:**

The Commission agrees in part. The requirement in 10 CFR 73.55(e)(10) focuses on the opening itself, whereas this requirement focuses on the requirement to monitor such openings. Therefore, the Commission disagrees with the suggestion to delete this requirement.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(i)(9)(iv) would imply that openings in the OCA barriers, since no OCA IDS is required, must be monitored at some undefined frequency to prevent exploitation. This is not a realistic requirement. If such a provision is needed, the commenter argued that it should focus on the security barriers of significance, which are PA barriers not covered by the IDS (e.g., a seawall where IDS technology is not appropriate due to ocean-spray conditions). Thus, the commenter recommended that the Commission insert “PA barrier” after “Unattended” in the beginning of the provision.

**NRC Response:**

The Commission disagrees. The Commission's expectation is that each licensee will ensure that any opening, in any barrier, will be monitored to ensure the opening can not be exploited because exploitation would mean that the barrier did not perform its intended function. The Commission has revised final rule text to clarify that the potential for “exploitation” is determined relative to the function being performed by the barrier. Because a VBS is not intended to function as a personnel barrier, the fact that a person could walk through the opening would not be an exploitation of that opening.

**Comment Summary:**

A third commenter stated that the proposed 10 CFR 73.55(i)(9)(iv) discusses unmonitored and unattended openings, but does not impose the 96 in<sup>2</sup> standard. The commenter asked if the provision should impose the 96 in<sup>2</sup> standard.

**NRC Response:**

The 96 square inch measurement is used because it is professionally accepted that an opening meeting this dimension is large enough for an average size person to fit through, and thereby,



could exploit or defeat the function of a personnel barrier. The Commission intends this requirement to be generic and performance-based for all barriers not just personnel barriers and therefore, the Commission has deleted the 96 square inches dimension.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(i)(9)(iii)(A) implies that only armed security officers can perform required patrols, so there is no basis for this new requirement. Thus, the commenter recommended that the NRC reword the proposed 10 CFR 73.55(i)(9)(iii)(A) to state: "Security patrols shall periodically check designated areas and shall inspect vital area entrances, portals, and external barriers in accordance with the Commission-approved security plans."

**NRC Response:**

The Commission disagrees. The Commission's expectation is that only armed patrols will be used to satisfy this requirement and that this requirement is necessary to maintain adequate protection. The Commission agrees that the designated areas and the periodicity of checks, which are site-specific, must be described in the NRC-approved security plans. However, the Commission disagrees with the suggested rule text change.

**Comment Summary:**

The same commenter stated that proposed 10 CFR 73.55(i)(9)(iii)(B) and (C) are not consistent with the DBT guidance provided in the Roy P. Zimmerman letter to NEI, dated April 5, 2004. The commenter noted that that letter stated, "Security personnel shall be trained to recognize and respond to obvious indications of tampering." Thus, the commenter recommended that the Commission revise the proposed 10 CFR 73.55(i)(9)(iii)(B) to state: "Physical barriers must be inspected at random intervals to identify obvious indications of tampering." Accordingly, the commenter recommended that the Commission revise proposed 10 CFR 73.55(i)(9)(iii)(C) to state: "Security personnel shall be trained to recognize obvious indications of tampering as necessary to perform assigned duties and responsibilities as described in the Commission-approved security plan".

**NRC Response:**

The Commission agrees in part. The Commission disagrees that, as written, this requirement is not consistent with NRC guidance. Guidance describes one acceptable way of satisfying NRC requirements. This requirement is consistent with the pre-existing 10 CFR 73.55(g)(1) which states, "All alarms, communication equipment, physical barriers, and other security related devices or equipment shall be maintained in operable condition." The Commission has revised the final rule to clarify armed patrols. Furthermore, the Commission has added the term "obvious indications of tampering" to the final rule 73.55(i)(5)(vii) to avoid redundancy.

**Comment Summary:**

Referring to proposed 10 CFR 73.55(i)(9)(iii)(B), one commenter asked who determines the metrics for randomness here, including the length of the interval overall and whether the random interval is on a per shift, per day, or per week basis.

**NRC Response:**

The Commission addresses "randomness" in guidance, but specific intervals are determined by each licensee through site-specific analysis and is subject to NRC inspection and must satisfy the design requirements in 10 CFR 73.55(b).

**Comment Summary:**

One commenter asked if proposed 10 CFR 73.55(i)(9)(iii) requires patrols of all redundant sets of equipment.

**NRC Response:**

Target set equipment is defined. Whether such equipment is redundant or not is irrelevant for the purpose of this requirement.

**Comment Summary:**

Referring to proposed 10 CFR 73.55(i)(9)(iii)(C), one commenter recommended that the NRC add the word “obvious” after the word “recognize” for consistency with the April 2004 DBT Order (Physical Protection Measures) and the approved security plans.

**NRC Response:**

The Commission agrees. This change was incorporated into the final rule.

**Comment Summary:**

A commenter recommended that the Commission change “and” to “or” so that 10 CFR 73.55(i)(9)(v) reads as, “...licensee protective strategy, or implementing procedures.”

**NRC Response:**

The Commission disagrees. The Commission has revised the final rule to delete reference to the licensee protective strategy because these actions are captured by procedures. The Commission has determined that the term “and” is appropriate.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73.55(i)(10)(i) is vague and should clarify that the video requirements are described in the PSP. Thus, the commenter recommended that the NRC replace “of this section” with “as described in the Commission-approved security plan.”

**NRC Response:**

The Commission disagrees. All requirements are addressed in the regulations, not the licensee security plans. However, the Commission has deleted this proposed requirement because it is redundant to the final rule in 10 CFR 73.55(n)(1)(i).

**Comment Summary:**

Another commenter stated that the Commission should modify 10 CFR 73.55(i)(10)(i) to state: “The licensee shall maintain in operable condition all video technology used to satisfy the monitoring, or observation, or surveillance, or assessment requirements of this section and available when needed.”

**NRC Response:**

The NRC agrees staff in part. The NRC has deleted this proposed requirement because it is redundant to the final rule in 10 CFR 73.55(n)(1)(i).

**Comment Summary:**

One commenter recommended that the Commission delete 10 CFR 73.55(i)(10)(iii), because it is not required by the Order. The commenter stated that it is a management issue not a regulatory issue and fatigue requirements are prescribed in the proposed 10 CFR 26.

**NRC Response:**

The Commission agrees. This requirement is deleted from the final rule. The Commission's expectation is that with the increased use of video technologies throughout the security profession, all licensees will ensure that inattentiveness due to fatigue is addressed by licensee management. This topic is a recognized and documented concern within the security profession.

**Comment Summary:**

Another commenter asked: "Why does this paragraph impose an alertness standard for video operators but not for other alarm system operators or response personnel? Is there a standard for alertness?"

**NRC Response:**

Current and retained Commission requirements address the qualification of personnel to effectively perform their assigned duties and responsibilities. This proposed requirement was intended to address a specific concern that is associated only with the use of video technology.

**Comment Summary:**

A commenter noted that the proposed 10 CFR 73.55(i)(11)(i) is a new requirement and the Order does not include a requirement to illuminate the OCA. The commenter asked for clarification on this section in the March 9, 2007, public meeting. Specifically, the commenter questioned whether the intent was to increase the amount of illumination in the OCA. The commenter noted that the NRC responded that whatever is in the protective strategy is acceptable.

**NRC Response:**

The Commission agrees in part. The NRC disagrees that this is a new requirement. The NRC has determined that lighting in the OCA is consistent with pre-existing licensee practices. Sufficient lighting is determined through site-specific analysis and must be part of the physical protection program design. The final rule provides flexibility to licensees to use of low-light technology in lieu of lighting in the PA or OCA.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(i)(11)(ii) retains the old deterministic requirement. The commenter noted that the NRC approved NEI 03-012, Section 10.1 and all power reactor licensee security plans with more appropriate performance-based requirements.

**NRC Response:**

The Commission agrees in part. The Commission did not eliminate the pre-existing 0.2 footcandle requirement but rather approved the use of low-light technology as an option for licensees to choose to use. This requirement ensures that one or the other option is met and establishes the regulatory framework for NRC approval of low-light technology.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73.55(i)(11)(ii) reinserts quantitative lighting levels which had been removed from all licensee's PSPs. The commenter stated that the Commission should word proposed 10 CFR 73.55(i)(11)(ii) to be consistent with the existing Commission-approved PSP. The commenter noted that, as currently worded, licensees would again have to place temporary lighting underneath temporary structures (e.g., trailers and all

exterior areas that are not accessible). Thus, the commenter suggested that the Commission revise proposed 10 CFR 73.55(i)(11)(ii) to state:

“Isolation zones and all exterior areas within the protected area shall be provided with illumination sufficient to 1) permit observation or detection of abnormal presence or activity of persons or vehicles within the isolation zone, a protected area, or a vital area; and 2) enable detection of intrusion or penetration or attempted intrusion or penetration of the isolation zone, a protected area, or a vital area, in a manner that assures initiation of an adequate response by the security organization consistent with the Commission-approved security plan performance objectives. The licensee may augment the facility illumination system, to include patrols, responders, and video technology with low-light technology capable of meeting the detection, assessment, surveillance, observation, monitoring, and response requirements as described in the Commission-approved security plan.”

**NRC Response:**

The Commission disagrees. The NRC agrees that this requirement clearly and explicitly retains the pre-existing 0.2 footcandle requirement. The relief granted by the NRC and referred to by this comment, does not eliminate, nor was it intended to eliminate, the 0.2 footcandle requirement but rather it allows the use of low-light technology in facility areas where the 0.2 footcandle requirement is not or can not be met.

This requirement provides a methodology and regulatory framework for licensees to account for site-specific areas where lighting levels do not meet 0.2 footcandle without having to resort to the use of additional or portable lights such as under trailers. The Commission has determined that this comment is addressed through the phrase “to meet the detection, assessment, surveillance, observation, monitoring, and response requirements of this section”. Therefore, the Commission disagrees with the suggested rule text change but has revised final rule text to clarify that low-light technology is not capable of meeting the requirements of this section but rather that it is a tool that can be used to meet the requirements of this section.

**Comment Summary:**

A commenter stated that 10 CFR 73.55(j)(1) is a new requirement; the Order includes no requirement to maintain continuous communication with offsite resources. The commenter argued that the ability to maintain such communication is beyond the ability of licensees. Thus, the commenter recommended that the Commission delete “resources to ensure effective command and control during both normal and emergency situations” from the provision in the final rule.

**NRC Response:**

The Commission disagrees. The pre-existing 10 CFR 73.55(f)(1) is retained in the final rule 73.55(j)(3) and requires security personnel to maintain the capability for continuous communication with CAS/SAS who can call for offsite Local Law Enforcement Agency (LLEA) support. This requirement focuses on the “capability” to communicate with both on-site security force and off-site LLEA resources when needed. The NRC has determined that this requirement is consistent with current security plans and other site emergency plans.

**Comment Summary:**

One commenter noted that 10 CFR 73.55(j)(3) is a new requirement for vehicle escorts, and the Commission should describe the vehicle escort communication requirements in NEI 03-12

Section 9.5.

**NRC Response:**

The NRC has revised the final rule to focus on continuous communication with on-site members of the security organization. The Commission disagrees that this is a new requirement. The pre-existing 10 CFR 73.55(f)(1) requires security personnel to maintain continuous communication capability with CAS/SAS and the current 10 CFR 73.55(d)(4) requires that security personnel escort vehicles in the PA.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(j)(3) requires each vehicle escort to have continuous communication with each alarm station, which should not be a requirement. The commenter stated that the final rule should allow for practical considerations associated with the nature of field communications. Thus, the commenter recommended that the Commission revise the provision in the final rule by deleting “vehicle escort” and “continuous.”

**NRC Response:**

The Commission disagrees. The pre-existing 10 CFR 73.55(f)(1) requires security personnel to maintain continuous communication capability with CAS/SAS and the current 10 CFR 73.55(d)(4) requires that security personnel escort vehicles in the PA.

**Comment Summary:**

Concerning the proposed 10 CFR 73.55(j)(4), one commenter stated that the Commission should retain the current rule language, which is clear and performance-based.

**NRC Response:**

The Commission disagrees. The Commission determined that these current requirements are appropriately, retained.

**Comment Summary:**

Another commenter stated that “conventional telephone service” in the proposed 10 CFR 73.55(j)(4)(i) appears to refer to landlines. However, the commenter argued that the cell phone is now so conventional that it could qualify. The commenter stated that if the Commission intends to refer to landlines, the rule should specify this.

**NRC Response:**

The Commission agrees in part. The Commission has determined that the term “conventional” is appropriately generic and that the focus of this requirement is represented by the term “service”. The Commission does not limit telephone “service” to the specific equipment used to access that “service such as landlines. The Commission’s intent is to ensure a commonly used communication capability.

**Comment Summary:**

One commenter stated that national emergency response drills have identified communications as being a persistent problem and satellite phones provide a solution. The commenter stated that commercial phone lines and cell phones are unreliable and problematic during emergencies; therefore, the Commission should require licensees to have at least three satellite telephones.

**NRC Response:**

The Commission agrees in part. The Commission agrees that communications are a concern for all responding personnel and agencies and acknowledges that each technology has benefits and vulnerabilities, however the Commission has determined that the requirement for telephone service must remain generic so as to not require updating every time a new technology becomes available and must refer to the telephone “service” that is common between all responding agencies. Therefore, the Commission disagrees that it is necessary to require the suggested specific technology in this rulemaking.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(j)(4)(iii) should not be a requirement for escorts. The commenter stated that licensee communication systems were never designed or required to be as robust as required by this proposed rule. The commenter stated that to do so would require significant modifications and funding, neither of which were justified by the SOC's.

Also, the commenter stated that the Commission should clarify if this provision applies to computer system intrusion attempts, and the Commission should define reasonable response that allows for an initial assessment of the problem. Thus, the commenter recommended that the Commission revise the provision by replacing “escorts, local, State, and Federal law enforcement agencies, and all other personnel necessary to coordinate both onsite and offsite responses” with “and local law enforcement authorities as described in the Commission-approved security plan.”

**NRC Response:**

The Commission agrees in part. The Commission has determined that communication capabilities are a fundamental necessity and are essential to the effectiveness of any licensee program. The Commission disagrees that this provision would require any modification to existing licensee programs other than the possible exception of implementing procedures to ensure that the currently used communication methodologies are identified and coordinated. The Commission disagrees that computer system intrusion attempts need to be identified in this requirement. The Commission determined that only communication with the control room needs to be identified in this requirement because all other entities listed are addressed elsewhere in this final rule.

**Comment Summary:**

A commenter noted that 10 CFR 73.55(j)(6) is a new requirement and will be virtually impossible to implement given plants' reinforced concrete construction and trip sensitive equipment.

**NRC Response:**

The Commission disagrees that this is a new requirement. This requirement is intended to ensure that such areas are identified and accounted for in procedures consistent with the pre-existing 10 CFR 73.55(f)(1). The Commission has revised the final rule to clarify that alternative communication may include an intercom system or could also be satisfied through a procedure that accounts for the time it takes for a patrol to pass-through the affected area and re-establish communication the failure of which would result in a response being initiated to determine the cause. These details are addressed in guidance.

**Comment Summary:**

A commenter stated that the NRC site security regulations for all nuclear power plants, reactor and high level nuclear waste storage, take into account the relative availability of local police.

**NRC Response:**

The Commission agrees. The final rule, in 10 CFR 73.55(k)(7) requires licensees to develop and document liaison with Local Law Enforcement to account for availability.

**Comment Summary:**

Another commenter noted that the proposed rule would require only five security guards per shift, up from three.

**NRC Response:**

The Commission disagrees. The final rule requires that licensees maintain the minimum number of armed responders needed to effectively implement the protective strategy. The specific number of armed personnel required is site-specific and is verified through force-on-force testing. The final rule in 10 CFR 73.55(k)(ii)(B) establishes the pre-existing 10 CFR 73.55(h)(3) requirement for 10 armed responders and explicitly deletes the pre-existing allowance to have five (5) if approved by the Commission.

The proposed rule attempted to address this minimum number in performance-based language, however, upon review, the Commission determined that it is important to clarify the Commission expectation that, although a license may have more than 10 armed responders, the Commission will no longer approve requests for less than 10 armed responders, available to perform response duties, inside the protected area at all times.

**Comment Summary:**

One commenter recommended that the Commission delete the phrase “at all times,” to reflect requirements in NEI 03-12 section 4.2 of the SCP. Also, the commenter recommended that the NRC replace the terms “significant core damage” and “spent fuel sabotage” with the term “radiological sabotage” because “radiological sabotage” is a defined term in 10 CFR 73.2 and the other terms are not.

**NRC Response:**

The Commission disagrees. The Commission has determined that “at all times” is appropriate. The final rule, in 10 CFR 73.55(k)(5), requires licensees to have procedures in place to reconstitute the minimum number of response personnel in the event that an individual responders becomes ill or are injured. The Commission retains the terms significant core damage and spent fuel sabotage in the final rule in 10 CFR 73.55(b)(3).

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(k)(1)(i) would require licensees to apply new protective resources and strategies towards the independent spent fuel storage installation (ISFSI) protection that are not required by current rules or NRC Orders. The commenter stated that the final rule should reference the security plan requirements. Thus, the commenter recommended that the Commission revise this provision by replacing “personnel” with “armed responders and armed security officers” and adding the phrase “as described in the Commission-approved security plan” to the end of the provision.

**NRC Response:**

The Commission disagrees. This requirement is a generic description leading to requirements for “armed responders and armed security officers” addressed in later subparagraphs. Addressing ISFSIs is an unsupported comment and is a site-specific condition that is not

addressed by this rulemaking.

**Comment Summary:**

A commenter recommended that the Commission delete and combine proposed 10 CFR 73.55(k)(1)(ii) and (k)(1)(iii) into following paragraph: “(k)(1)(iii)The licensee shall provide, maintain, and describe in the approved security plans, all firearms and equipment to be possessed by or readily available to, armed personnel to implement the protective strategy and carry out all assigned duties and responsibilities. This description must include the general distribution and assignment of firearms, ammunition, body armor, and other equipment used.”

**NRC Response:**

The Commission agrees in part. The NRC agrees that the requirements of 10 CFR 73.55(k)(1)(ii) and (k)(1)(iii) are related and has deleted this requirement from the final rule in 10 CFR 73.55 because it is redundant to Appendix B and Appendix C to Part 73.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73.55(k)(1)(iii) would require licensees to describe, in detail, what firearms and equipment licensees utilize, which would take licensees back to the pre-NEI 03-12 (security plan template) days when licensees were forced to make frequent security plan changes as they enhanced their protective strategies as equipment aged and technology changed. The commenter noted that the Commission-endorsed NEI 03-12 just requires documenting the minimum requirements that currently exist in 10 CFR 73.55, Appendix B. Thus, the commenter recommended that the NRC insert “as described in Part 73 Appendix B, Section G that are” after “equipment.”

**NRC Response:**

The Commission disagrees with this comment. However, the Commission has determined that this requirement is redundant to the final rule requirements of Appendix B and Appendix C to Part 73 and, therefore, has deleted this requirement from the final 10 CFR 73.55.

**Comment Summary:**

Another commenter asked that, in requiring the licensee to describe the distribution of firearms and equipment, is the rule referring to how the firearms and equipment will be distributed to individuals during response, or to how the firearms and equipment are distributed in locked cabinets on a routine basis?

**NRC Response:**

The Commission has deleted this requirement from the final 10 CFR 73.55 because it is redundant to Appendix B and Appendix C to Part 73.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73.55(k)(2) only recognizes state law, but some licensee facilities are located on a federal reservation where federal law is also applicable. Thus, the commenter recommended that the Commission add “and/or federal law” to the end of the provision in the final rule.

**NRC Response:**

The Commission agrees. The final rule is revised to include federal law enforcement agencies that may have jurisdictional authority for some sites.



**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(k)(2) is a key section of the rule and one that allows the use of deadly force against adversaries. However, the commenter noted that it is based on threats to individuals and not to the safety systems of the plant. The commenter asked: "Under the EPA Act of 2005, are security officers permitted to use deadly force against intruders who appear determined to disable or destroy safety systems and/or target sets? If not, does the 'defense of others' phrase refer to others throughout society?"

**NRC Response:**

State and federal laws govern the use of deadly force depending on which has jurisdictional authority over the site.

**Comment Summary:**

One commenter stated that for cases where a plant does not have armed security officers, the Commission should revise the final rule to state: "The licensee shall provide an armed response team consisting of armed responders and armed security officers, to carry out response duties as described in approved security plans."

**NRC Response:**

The Commission agrees in part. The NRC has revised the final rule, in 10 CFR 73.55(k)(4), to clarify that the use of armed security officers is a site specific determination and are not "required" except as identified by the licensee in the protective strategy and stated in NRC-approved security plans.

**Comment Summary:**

Another commenter stated that the final rule should ensure that security officers with duties other than immediate armed response are not required for protection against the DBT and are not inappropriately credited in FOF exercises. The commenter noted that the proposed rule requires that licensees provide an armed response team consisting of both "armed responders" and "armed security officers." The commenter explained that the difference between the two terms is that "armed responders" cannot be assigned "any other duties or responsibilities that could interfere with response duties." "Armed security officers," on the other hand, can be assigned such duties or responsibilities. Therefore, the commenter argued that the Commission should write the final rule to clarify that only "armed responders" can be utilized in the protective strategy to protect against the DBT.

**NRC Response:**

The Commission agrees in part. This issue is specifically addressed by this final rule in 10 CFR 73.55(k) which requires that licensees document, in the Commission-approved security plans and site protective strategy, the minimum number of armed responders who are inside the protected area and are available at all times to perform response duties. Armed responders may not be assigned other duties. This requirement also allows the licensee to supplement armed responders with armed security officers, who are onsite and available at all times to perform response duties during contingency events, if the armed security officers are trained, qualified and equipped to perform these response duties and the minimum number of armed security officers is specified in the NRC-approved security plans and site protective strategy.

The Commission agrees that because armed security officers are not required for immediate response, they may be assigned other duties. However, if used, the licensee is required to specify the duties that armed security officers will perform within the protective strategy and is

responsible for ensuring that other assigned duties, not required by the protective strategy, do not prevent the armed security officers from meeting their response duties and timelines as specified by the protective strategy.

For the purposes of force-on-force testing, a licensee may use less than the documented number of armed responders and armed security officers, but is explicitly prohibited from using more than the minimum number stated in the approved security plans and protective strategy. Therefore, the Commission disagrees with the recommendation to limit a licensee to only utilize armed responders designated in the Commission-approved security plans and site protective strategy to protect against the design basis threat and for the purpose of force-on-force testing.

**Comment Summary:**

One commenter recommended that the Commission include PA access point in the proposed 10 CFR 73.55(k)(3)(i)(B). Thus, the commenter stated that the Commission should insert “or at a PA access point” after “protected area.”

**NRC Response:**

The Commission disagrees. The NRC has determined that armed responders may be located at a PA access portal provided that these personnel remain physically inside the PA and are able to meet response timelines required by the licensee protective strategy.

**Comment Summary:**

Another commenter agreed that a PA guards’ sole responsibility is inside the PA.

**NRC Response:**

No response necessary.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(k)(3)(iv) is redundant with the proposed 10 CFR 73.55(k)(1)(ii). Thus, the commenter recommended that the NRC delete this provision from the final rule.

**NRC Response:**

The Commission agrees. The NRC has deleted this requirement from the final rule because it is redundant to Appendix B and Appendix C to Part 73 and the final rule in 10 CFR 73.55(n)(1)(i).

**Comment Summary:**

Two commenters stated that proposed 10 CFR 73.55(k)(3)(iv) is redundant to the proposed 10 CFR 73.55(k)(1)(iv). One commenter stated that the Commission should delete proposed 10 CFR 73.55(k)(3)(iv) from the final rule.

**NRC Response:**

The Commission agrees. The NRC has deleted this requirement from the final rule because it is redundant to Appendix B and Appendix C to Part 73 and the final rule in 10 CFR 73.55(n)(1)(i).

**Comment Summary:**

A commenter asked: “In the event of a strike, would work hours limitations be waived?”

**NRC Response:**

A strike condition must be considered by each licensee and pre-determined plans for strike conditions would be implemented. The Commission requires the licensee to maintain the minimum number of armed response personnel stated in their NRC-approved plans at all times. This requirement focuses on events such as illness or injury and the procedures to be followed to re-establish the minimum number.

**Comment Summary:**

A commenter asked: "Is the protective strategy subject to NRC review/approval? Is it incorporated by reference into some licensing document?"

**NRC Response:**

The licensee protective strategy is not subject to Commission review and approval. The protective strategy is similar to an implementing procedure which is subject to frequent change and is tested through force-on-force exercises. Therefore, the Commission has determined that it is not effective, nor efficient to require the protective strategy to be reviewed and approved by the NRC.

**Comment Summary:**

One commenter noted that 10 CFR 73.55(k)(6) is a new requirement not required by the Order. The commenter argued that only appropriate facility personnel should be required to receive periodic training as to their responsibilities in responding to hostage and duress situations.

**NRC Response:**

The Commission agrees in part. The Commission has deleted this proposed requirement from the final rule because it is inclusive to licensee training programs. The Commission's expectation is that all employees present in the PA at the time of a security event have basic knowledge of what actions are expected of them to ensure security actions can be carried out without interference from or danger to that employee.

**Comment Summary:**

Another commenter stated that the proposed 10 CFR 73.55(k)(6) is more stringent than the original NRC ICM Order requirements. In addition, the commenter noted that the phrase "security incidents" is undefined and confusing. Lastly, the commenter argued that this provision is redundant, in some aspects, to proposed 10 CFR 73.55(c)(4)(ii). Thus, the commenter recommended that the Commission replace "all personnel authorized unescorted access to the protected area are trained and understand their roles and responsibilities during security incidents, to include hostage and duress situations" with "appropriate plant personnel maintain an ability to respond to a hostage or duress situation" in this provision of the final rule.

**NRC Response:**

The Commission disagrees. The Commission has deleted this proposed requirement from the final rule because it is inclusive to licensee training programs. The Commission's expectation is that all employees present in the PA at the time of a security event have basic knowledge of what actions are expected of them to ensure security actions can be carried out without interference from or danger to that employee.

**Comment Summary:**

One commenter asked if this provision requires training for all personnel on site (including administrative, clerical, janitorial), or if the phrase should be "trained in their roles and

responsibilities relating to response to security incidents.”

**NRC Response:**

The NRC intended that all personnel inside the PA be trained. The Commission has deleted this proposed requirement from the final rule because it is inclusive to licensee training programs. The Commission’s expectation is that all employees present in the PA at the time of a security event have basic knowledge of what actions are expected of them to ensure security actions can be carried out without interference from or danger to that employee.

**Comment Summary:**

A commenter recommended that the Commission merge the proposed 10 CFR 73.55(k)(7)(i) and (ii) to state: “Determine the existence and level of the threat through the use of assessment methodologies or procedures.”

**NRC Response:**

The Commission agrees. The NRC has revised final rule text.

**Comment Summary:**

A commenter recommended that the NRC delete “intercept” from 10 CFR 73.55(k)(7)(iii) because response strategies do not require interception.

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule for consistency with the final rule in 10 CFR 73.55(b)(3)(i). The Commission has revised the final rule to replace the terms “intercept”, “challenge”, and “delay” with the single term “interdict”.

**Comment Summary:**

A commenter noted that the proposed 10 CFR 73.55(k)(7)(iv) is a new requirement and the Order does not require notification of off-site agencies other than local law enforcement. The commenter recommended that the Commission revise the provision to state: “Notify local law enforcement, in accordance with site procedures.”

**NRC Response:**

The Commission agrees in part. The Commission has revised the final rule to specify LLEA. However, the Commission’s expectation is that each licensee will determine the off-site support needed to respond to an event and will follow its own procedures for notifying offsite support agencies.

**Comment Summary:**

One commenter noted that 10 CFR 73.55(k)(8) is a new requirement and the Order does not require agreements with agencies other than local law enforcement. Thus, the commenter recommended that the Commission retain the language in current 10 CFR 73.55(h)(2).

**NRC Response:**

The Commission disagrees because this requirement retains the pre-existing 10 CFR 73.55(h)(2). This requirement is not intended to be “all inclusive” (i.e., agreements with all three agencies), however, this requirement is intended to generically account for those sites whose LLEA is a state or federal law enforcement agency.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73.55(k)(8) should only refer to the requirements in Part 73 Appendix C. The commenter argued that the phrase “document and maintain current agreements with local, state, and Federal law enforcement agencies” is not appropriate for all licensees. Thus, the commenter recommended that the Commission revise this provision in the proposed rule by replacing “document and maintain current agreements with local, state, and Federal law enforcement agencies, to include estimated response times and capabilities” with “maintain an integrated law enforcement response plan in accordance with Part 73 Appendix C.”

**NRC Response:**

The Commission disagrees because this requirement retains the pre-existing 10 CFR 73.55(h)(2).

**Comment Summary:**

Multiple comments

**NRC Response:**

The NRC has revised final rule text in 10 CFR 73.55(l) to include a maximum 20 weight percent of plutonium dioxide (PuO<sub>2</sub>) in MOX fuel assemblies. Weight percents of greater value will require Commission approval and is discussed in the revised 10 CFR 73.55(l)(7). The Commission has revised final rule text to move the applicability statement and protection against theft and diversion statement of this requirement to 10 CFR 73.55(l)(1).

**Comment Summary:**

One commenter stated that the requirements in 10 CFR 73.55(l)(1) of the proposed rule are technically unsupportable, irresponsible, and set a dangerous precedent. The commenter believed that this section of the proposed rule should be removed. The commenter provided several arguments in support of this suggestion. First, the commenter explained that this section of the proposed rule substitutes security requirements for unirradiated MOX fuel assemblies. The commenter stated that this substitution is inadequate and will not result in the necessary level of protection. The commenter urged the Commission to revise the SOCs to remove any suggestion that the proposed rule language strengthens security requirements.

**NRC Response:**

The Commission disagrees. The NRC has determined that the requirements of this paragraph provide the appropriate regulatory framework and minimum security measures necessary for the protection of MOX fuel assemblies at NRC licensed nuclear power reactor facilities. These requirements are necessary for adequate protection of MOX fuel assemblies considering the size, configuration, and form of the nuclear material.

**Comment Summary:**

The commenter also stated that through this proposed rulemaking, the Commission is ignoring the Atomic Safety and Licensing Board’s (ASLB’s) decision in the Catawba case. In that case, the ASLB added security conditions to Duke Energy’s proposed security plan. One of the ASLB’s conditions is not in the proposed rule.

The commenter also argued that the NRC did not define MOX fuel in the proposed rule (with regard to concentration, weight, or any other physical property), and suggests that this is necessary. Finally, the commenter disagreed with the fact that the proposed rule language does not make a distinction between the security applied to a small number of MOX lead test

assemblies (LTAs) and the security applied to a large number of assemblies. Given all of these issues, the commenter urged the Commission to delete this section from the proposed rule.

**NRC Response:**

The Commission disagrees. The requirements of this 10 CFR 73.55(l)(1) incorporate Commission direction relative to the site-specific security measures applied at Catawba. The Commission considered the further ASLB recommendations and determined that these additional measures were not necessary for adequate protection and directed that the security measures to be implemented should be in alignment with the Commission's initial position.

In addition, the Commission has determined that the security measures addressed by this paragraph apply for the protection of MOX fuel and, therefore, there is no need to distinguish between a small or large number of assemblies. The Commission disagrees that MOX fuel should be defined in this rulemaking and has determined that an adequate characterization of MOX fuel is provided in draft regulatory guidance for MOX fuel.

**Comment Summary:**

Another commenter volunteered to address any questions and provide subject matter expertise for any comments related to mixed oxide fuels.

**NRC Response:**

The Commission has determined that this offer of assistance is not appropriate for the rulemaking process.

**Comment Summary:**

A commenter stated that the rationale the NRC provides for relaxing security for MOX fuel does not justify the proposed generic lowering of security for such material. The commenter explained that a terrorist's ability to extract plutonium from MOX would depend on the terrorist's experience. The commenter further suggested that fuel assemblies are heavy and awkward only if they remain intact. Finally, the commenter stated that the NRC should not rely on predictions about terrorists' intentions, instead of their capabilities, dedication, and objectives.

**NRC Response:**

The Commission disagrees. The NRC disagrees that the security measures for MOX fuel is relaxed by this rulemaking because plutonium dioxide in this configuration is a new application not addressed in pre-existing regulations. The Commission has determined that due to the low plutonium weight percentage or concentration in the MOX fuel, certain requirements for CAT I materials are unnecessary regulatory burden and, therefore, this paragraph establishes the appropriate regulatory framework for the physical protection of un-irradiated MOX fuel assemblies. The requirements addressed in this section focus on protection against the DBT of radiological sabotage while the requirements of paragraph 10 CFR 73.55(l) provide additional requirements including protection against theft and diversion of MOX fuel assemblies.

**Comment Summary:**

One commenter stated that the term "search" in 10 CFR 73.55(l)(3)(iii)(B) is not clear. The commenter explained that the Commission does not provide a reason for why MOX assemblies would require a "search" for security reasons when regular fuel does not. The commenter also suggested that the requirement for a tamper indicating device in 10 CFR 73.55(l)(3)(ii) would obviate the need for a search. An intact tamper indicating device at fuel receipt provides high assurance that the fuel is in the same state as when it was shipped. The commenter urged the

Commission to delete this requirement.

**NRC Response:**

The Commission disagrees that the use of a tamper indicating seal obviates the need for a search. A tamper indicating seal is one level of protection to be used in conjunction with others to provide defense-in-depth. As stated in the final rule, in 10 CFR 73.55(l)(3)(iv), the licensee may choose to conduct both inspection and search of the MOX fuel assembly simultaneously. The Commission has determined that the search of MOX fuel assemblies is necessary and appropriate to assure adequate protection of MOX fuel assemblies and is consistent with other NRC requirements for inspection of MOX fuel assemblies for damage.

**Comment Summary:**

With regard to 10 CFR 73.55(l)(3)(vi), the commenter stated that a licensee already has a material control and accountability (MC&A) program for the spent fuel pool in which the MOX assemblies are stored. The commenter suggested that a unique program for only the MOX assemblies is unnecessary and would result in a greater potential for errors. The commenter suggested that MOX assemblies be controlled and accounted for under the licensee's existing MC&A program. The commenter urged the Commission to delete this proposed provision.

**NRC Response:**

The Commission agrees in part. The NRC disagrees with the suggestion to delete this requirement. However, the Commission agrees that the existing licensee MC&A programs may be used to account for MOX fuel assemblies. The Commission has determined that it is prudent and necessary to document and maintain records that positively identify MOX fuel assembly locations within the spent fuel pool.

**Comment Summary:**

With regard to 10 CFR 73.55(l)(3)(vii), the commenter stated that it is hard to see how this requirement would be implemented without controlling the entire MC&A database as SGI, which, according to the commenter, is impractical. The commenter suggested that handling fuel prior to and during an outage would be especially difficult if all records of MOX assembly locations are controlled as SGI. For lead assemblies, the Commission did not require the locations to be controlled as SGI. The commenter suggested that the proposed requirement is unneeded and should be deleted.

**NRC Response:**

The Commission agrees. The NRC acknowledges that 10 CFR 73.55(l)(3)(vi) intends that the existing MC&A recordkeeping system may be used and that this provision could necessitate that the entire MC&A database be marked as SGI. The Commission has determined that the protection of MC&A records must be evaluated against the criteria of 10 CFR 73.21 to determine if such information must be protected and that a blanket requirement to protect MOX fuel MC&A records as SGI is an unnecessary regulatory burden. Therefore, the Commission has deleted this proposed requirement from the final rule.

**Comment Summary:**

One commenter suggested that the NRC rewrite 10 CFR 73.55(n)(1) to require licensees to review the security program 12 months following initial implementation and then at least every 24 months, or as currently approved in the security plan.

**NRC Response:**

The Commission agrees. The NRC has revised 10 CFR 73.55(m)(1) by addressing the overall 24 month requirement first and addressing the conditional 12 month periodicity in the final rule in 10 CFR 73.55(m)(1)(i).

**Comment Summary:**

Another commenter stated that the Commission should remove “as a minimum” in 10 CFR 73.55(n)(2) because it is open to interpretation.

**NRC Response:**

The Commission disagrees. The Commission has determined that the phrase "as a minimum" is appropriate and has retained this phrase in the final rule. The Commission has concluded that 24 is a minimum, with more frequent reviews to be conducted when certain conditions exist.

**Comment Summary:**

One commenter stated that the proposed 10 CFR 73.55(n)(2)(ii) is open to interpretation and contains more restrictive requirements than those that currently exist. In particular, the commenter suggested that the Commission remove the phrase “but not be limited to” and replace the phrase “safety/security interface” with “plant operations/security interface.”

**NRC Response:**

The Commission disagrees. The Commission requires that the physical protection program be reviewed at intervals not to exceed every 24 months. The components listed in this requirement are all components of the physical protection program and, therefore, are applicable. Where licensee programs outside the security organization provide an appropriate review of these security-related programs, the licensee may take credit for that review provided its effectiveness as it pertains to the physical protection program is documented. The licensee is responsible to ensure that all elements the program are reviewed.

**Comment Summary:**

Another commenter suggested that the assessment process outlined in NEI 04-04 meets the requirement in 10 CFR 73.55(n)(2)(ii). The commenter suggested that the Commission add the clarifying language from NEI 04-04 to the SOCs. The commenter also suggested that the Commission clarify the SOCs to state that a single audit of a fleet level program will be sufficient to meet the requirement of each individual plant in that fleet.

**NRC Response:**

The Commission disagrees. The Commission has determined that the recommendation to include descriptions prescribed by industry guidance in the SOCs for this final rule is not appropriate. In addition, the Commission has also concluded that including a statement regarding the acceptability of a licensee audit process in the Statements of Consideration for this final rule is also not appropriate. Commission requirements apply to all sites regardless of corporate ownership of multiple sites.

**Comment Summary:**

One commenter stated that there should be a rule requirement prescribing the timeframe in which a licensee must determine that a cyber attack is occurring or has occurred.

**NRC Response:**

The Commission disagrees. The Commission has determined that this comment is outside the



scope of security program reviews and is addressed by the final rule in 10 CFR 73.54. The Commission has moved all cyber security program requirements from the proposed 10 CFR 73.55(m) to a stand-alone section 10 CFR 73.54, and therefore, has deleted this requirement from the final rule.

**Comment Summary:**

Another commenter stated that the assessment process outlined in NEI 04-04 meets the requirement in 10 CFR 73.55(n)(4). The commenter suggested that the Commission add the clarifying language from NEI 04-04 to the SOCs.

**NRC Response:**

The Commission disagrees that text from industry guidance should be incorporated into this rulemaking. The Commission's expectation is that the cyber security program is a component of the physical protection program and, therefore, must be reviewed at least every 24 months.

**Comment Summary:**

A third commenter stated that the proposed 10 CFR 73.55(n)(4) places cyber security within the licensees' security organization. The commenter suggested that since the current security organization does not currently oversee cyber security, the proposed 10 CFR 73.55(n)(4) is more appropriate under the proposed 10 CFR 73.58, or another new section.

**NRC Response:**

The Commission disagrees. The Commission's expectation is that the cyber security program is a component of the physical protection program and, therefore, must be reviewed at least every 24 months. This requirement does not specify the personnel to be used except that assigned personnel possess the requisite technical skills and knowledge needed to perform such a review.

**Comment Summary:**

One commenter asked for more detail on how the proposed rule addresses the expanded FOF requirements from the EPAAct of 2005. In particular, the commenter asked about exercise periodicity and the rule text addressing potential conflicts of interest.

**NRC Response:**

The Commission has deleted this requirement from the final rule 73.55 because it is redundant to the final rule Appendix B, to Part 73. The requirements of Appendix B address the annual periodicity requirement and requirements for avoidance of conflicts of interest.

**Comment Summary:**

Another commenter noted that the proposed 10 CFR 73.55(n)(5) would require drills and exercises to be performed in accordance with the proposed new requirements in Part 73, Appendix C. The commenter suggested, however, that the requirements in proposed Part 73 Appendix C, Section II (I) through (I)(6)(iv) do not belong in the SCP. The commenter suggested that NRC reword 10 CFR 73.55(n)(5) to state that licensees conduct quarterly drills and annual FOF exercises in accordance with the performance evaluation program, as described in the Commission-approved security plans.

**NRC Response:**

The Commission disagrees. NRC requirements are addressed in the regulations and not by license security plans. However, the Commission has determined that this requirement is

redundant to the final rule Appendix B to Part 73 and, therefore, has deleted this requirement from the final rule 73.55.

**Comment Summary:**

Another commenter suggested that the Commission delete 10 CFR 73.55(n)(5) because it is not an audit or review requirement.

**NRC Response:**

The Commission agrees and has deleted this requirement from the final rule.

**Comment Summary:**

One commenter stated that the NRC should delete 10 CFR 73.55(n)(6) because requirements in subsequent provisions address corrective action programs (CAPs) adequately to address review and audit findings.

**NRC Response:**

The Commission disagrees. The Commission has determined that this requirement establishes the appropriate regulatory framework for the inclusion of security findings in the site's CAP.

**Comment Summary:**

One commenter stated that the NRC does not need to include 10 CFR 73.55(n)(8) in the final rule. The commenter explained that issues placed into the CAP are resolved within that program.

**NRC Response:**

The Commission agrees. The Commission has deleted this proposed requirement from the final rule. The Commission's expectation is that each license will make all appropriate changes to ensure the effectiveness of the physical protection program to meet NRC requirements and provide high assurance.

**Comment Summary:**

A commenter stated that audits are not annual, as suggested by the proposed rule. The commenter explained that audits are biennial, instead, and the proposed rule language should reflect that. Also, the commenter stated that NEI 03-12 provides the following guidance: audits may be conducted up to six months before or up to six months after the scheduled date. The next scheduled date is 24 months from the originally scheduled date.

**NRC Response:**

The Commission agrees in part. The Commission has deleted this requirement because the timeframes described are not appropriate to audits and reviews. The Commission uses the term "review" to mean a complete evaluation of all physical protection program components to confirm compliance with NRC requirements and the term "audits" to mean a component of reviews to confirm that the licensee is in fact following its internal plans, procedures, and policies.

**Comment Summary:**

One commenter asked who determines the "predetermined intervals" in which testing and maintenance are required. The commenter asked if the Commission plans to identify the predetermined intervals in guidance and whether the public will be able to comment on the

proposed interval. The commenter also asked if a piece of equipment fails to work, but this is discovered when the piece of equipment is not in operation, then is this failure considered a violation.

**NRC Response:**

This requirement provides generic performance-criteria for all physical protection program systems and equipment. The specific pre-determined intervals must be sufficient to maintain the equipment in operable condition and ensure that it is capable of performing its intended function. Generally, manufacturer specifications are considered appropriate. If not in use at the time of failure, this requirement does not apply.

**Comment Summary:**

A commenter asked the Commission, "Who defines or determines what is 'security-related components or equipment?'"

**NRC Response:**

Each licensee determines "security-related components or equipment" through site-specific analysis and NRC regulations.

**Comment Summary:**

One commenter suggested that the NRC move 10 CFR 73.55(o)(1)(iv) to 10 CFR 73.55(p).

**NRC Response:**

The Commission disagrees. The NRC has determined that the focus of this requirement is failures associated with maintenance, testing, and calibration activities. The requirements of the final 10 CFR 73.55(o) provide performance-criteria to be met by compensatory measures.

**Comment Summary:**

Two commenters stated that intrusion detection and access control equipment referenced in the proposed 10 CFR 73.55(o)(3) are physical protection intrusion detection and access control equipment, and passwords are not considered a part of "access control equipment." The commenters suggested that the Commission include clarification in the SOC to better define when the Commission is referring to physical access controls as opposed to electronic access to digital assets.

**NRC Response:**

The Commission agrees. This requirement focuses on the need for testing the "equipment" that physically controls access and does not include the testing of access control devices. The Commission disagrees that this distinction is necessary in the statements of consideration for this rulemaking.

**Comment Summary:**

One commenter stated that on-site and off-site communication systems should be tested no less than daily, and this requirement should never be relaxed.

**NRC Response:**

The Commission agrees with this comment specific to the requirement stated in the final 10 CFR 73.55(n)(5).

**Comment Summary:**

Another commenter suggested that the proposed 10 CFR 73.55(o)(5) is a new requirement. To remove the new requirements from the final rule, the commenter suggested that the Commission delete “each control room, and between the alarm stations and offsite support agencies.”

**NRC Response:**

The Commission disagrees. This requirement is retained from the pre-existing 10 CFR 73.55(g)(3) and is updated to clarify the entities with which this communication capability must be verified and maintained on a daily basis to support the physical protection program.

**Comment Summary:**

One commenter suggested that the NRCstaff replace the words “time lines” with “time frames.

**NRC Response:**

The Commission agrees. The term "time-lines" is most commonly used to describe actions required within licensee protective strategies and to avoid confusion, the NRC has revised the final rule to use the term "times-frames'.

**Comment Summary:**

One commenter suggested that the NRC rename this proposed 10 CFR 73.55(q) to “Suspension of security measures.” The commenter also suggested that the NRC change “safeguards measures” in 10 CFR 73.55(q)(1)(i) to say “security measures.”

**NRC Response:**

The Commission agrees.

**Comment Summary:**

A second commenter stated that the proposed 10 CFR 73.55(q)(1)(i) does not recognize the ISFSI safeguards suspension allowances authorized under 10 CFR 72.32(d). The commenter suggested that the Commission should incorporate the suspension allowances authorized under 10 CFR 72.32(d) in the final rule.

**NRC Response:**

The Commission disagrees. The Commission has determined that ISFSIs are addressed by other NRC regulations and, therefore, are not addressed herein.

**Comment Summary:**

A commenter suggested that the Commission change the word “safeguards” in 10 CFR 73.55(q)(1)(ii) to “security measures.” In this same provision, the commenter suggested that the Commission change “the security supervisor” to “security supervision.”

**NRC Response:**

The Commission agrees in part. The Commission agrees that the phrase "affected security measures" is more appropriate and has revised the final rule. The Commission disagrees with the suggested use of "security supervision" and has determined that the term “supervisor or manager” is needed to specify this individual.

**Comment Summary:**

Another commenter suggested that the proposed 10 CFR 73.55(q)(1)(ii) requires suspension

approval by a Senior Reactor Operator (SRO). The commenter stated that this requirement goes beyond the current Commission-approved security plan requirements as specified in NEI 03-12, "Template for the Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, [and Independent Spent Fuel Storage Installation Security Program]." The commenter suggested that the Commission revise this provision to require that the on-shift operations manager approve the suspension of safeguards, rather than a SRO.

**NRC Response:**

The Commission disagrees in part. The Commission has concluded that this allowance is based upon the current 10 CFR 50.54(x) and (y) and, therefore, must be approved by an individual who is in a position of management and who possesses an appropriate level of knowledge and understanding pertaining to the plant condition at the time that safeguards measures are suspended. The NRC-approved security plans, approved on October 26, 2004, specified the Emergency Director (who is generally the SRO or someone with equal knowledge and understanding) and Security Supervisor for this decision.

**Comment Summary:**

A commenter suggested that the NRC replace "reimplemented" in 10 CFR 73.55(q)(2) with "restored."

**NRC Response:**

The Commission agrees in part. The NRC has determined that the term reinstate is most appropriate.

**Comment Summary:**

A commenter suggested that the NRC change "safeguards measures" in 10 CFR 73.55(q)(3) to say "security measures."

**NRC Response:**

The Commission agrees.

**Comment Summary:**

A commenter suggested that the Commission move 10 CFR 73.55(q)(4) to the end of 10 CFR 73.55(q)(3).

**NRC Response:**

The Commission agrees. The NRC has deleted this requirement from this section.

**Comment Summary:**

A second commenter stated that 10 CFR 73.55(q)(4) appears to waive the requirement for duplicate reports under 10 CFR 50.72 only with respect to the suspension of safeguards measures. The commenter asked if this is the Commission's intent. The commenter continued that if it is the Commission's intent to waive all duplicate reports, then the NRC should move the requirement to 10 CFR 73.71.

**NRC Response:**

The Commission agrees. The NRC has determined that 10 CFR 73.71 addresses this requirement and, therefore, has deleted this requirement from the final rule.

**Comment Summary:**

One commenter asked what the difference is between 10 CFR 73.55(r)(1) and 10 CFR 73.55(d)(5)(ii). The commenter suggested that, if there is no difference, the NRC should delete 10 CFR 73.55(r)(1) from the final rule.

**NRC Response:**

Both requirements were retained from the current 10 CFR 73.55(b)(1)(ii). 10 CFR 73.55(r)(1) is retained and applies to the licensee. The requirement stated in 10 CFR 73.55(d)(5)(ii) applied only to a written statement that would be documented in a contract for security services. The Commission has determined that such a requirement to specify Commission regulations in a contract for security services is not necessary and therefore, has deleted 10 CFR 73.55(d)(5)(ii).

**Comment Summary:**

In the proposed 10 CFR 73.55(d)(5)(ii), one commenter recommended the NRC delete the words "copies of" from the provision, as the commenter did not believe it is necessary for the NRC to have original versions of reports.

**NRC Response:**

The Commission disagrees. The NRC has deleted the phrase "copies of" from the final rule to explicitly specify the Commission's authority to remove originals or copies of any and all documents or records that are required by NRC regulations, whenever the Commission determines that such action is necessary.

**Comment Summary:**

Another commenter suggested that the proposed 10 CFR 73.55(r)(2) exceeds the current rule and security plan requirements. The commenter suggested that the Commission reword the final rule language to state that licensees must retain all records "in accordance with Commission-approved security plans."

**NRC Response:**

The Commission disagrees with the suggested text because licensees retain records in accordance with Commission regulations and not security plans.

**Comment Summary:**

One commenter suggested that the NRC delete 10 CFR 73.55(s) of the proposed rule. The commenter explained that the NRC duplicates this section in 10 CFR 73.58.

**NRC Response:**

The Commission agrees. This Commission has deleted this proposed requirement because the applicable regulatory framework is established in 10 CFR 73.58.

**Comment Summary:**

A second commenter stated that the requirements in proposed 10 CFR 73.55(s) and 73.58 are unclear because the Commission does not explain what, if anything, is needed beyond current processes (e.g., site program impact process). The commenter suggested that the Commission expand the SOC section to explain the expectations for such a process, including what specifically is needed beyond current practices and procedures.

**NRC Response:**

The Commission agrees. This NRC has deleted this proposed requirement because the applicable regulatory framework is established in 10 CFR 73.58. The intent of this requirement was to provide a regulatory link between 10 CFR 73.55 and 73.58 and to emphasize the coordination of safety and security activities in a coherent manner.

**Comment Summary:**

In reference to proposed 10 CFR 73.55(a)(4), 73.55(c)(1), and 73.55(t)(2), one commenter noted that “the first reference states that licensees will implement the physical protection program in accordance with Commission regulations, etc., and the second reference appears to support that. However, the second reference acknowledges that alternative measures could be submitted in accordance with 10 CFR 50.4 and 50.90 and, therefore, might be approved by the Commission.” The commenter asked: “What is the legally controlling document, the regulations or the licensees’ NRC-approved physical security plans?”

**NRC Response:**

The Commission concluded that this comment may reflect an over simplification of the NRC regulatory processes. It is more accurate to state that both the NRC’s regulations and the NRC-approved plans are legally controlling, however, the fact that a licensee has an NRC-approved security plan does not relieve the licensee from compliance with NRC regulations. NRC regulations are legally controlling in that they set forth the regulatory framework and general performance objectives and requirements to be implemented by each licensee. The NRC-approved plans describe how the licensee will comply with NRC regulations through implementation, which *includes* any NRC-approved exemptions and alternatives. To the extent that there are differences between the licensee’s security plan and NRC requirements, those differences must be explicitly approved by the NRC, through an NRC-granted exemption (10 CFR 73.5), or an NRC-approved “alternative measure” (final rule 10 CFR 73.55(r)).

The Commission recognizes that generic regulations cannot always account for site-specific conditions and, therefore, has determined that some degree of regulatory flexibility is necessary to ensure that each licensee is able to design their physical protection program to effectively satisfy the "high assurance" performance objective in the final rule (10 CFR 73.55(b)). Therefore, the final rule is revised to address the mechanisms through which the Commission reviews and approves a licensee’s need for an alternative measure or exemption from one or more NRC requirements provided sufficient justification is demonstrated.

Upon the NRC’s written approval, the measure or measures specified by the NRC in writing, become legally binding as a license condition in lieu of the specific requirement stated in the regulations. It is important to note that the fact that the NRC may have approved a security plan containing a deficiency or conflict, does *not* shield the licensee from regulatory compliance. In such cases the NRC and licensee will work together to resolve the conflict and if needed, changes could be made to the licensee's security plans to ensure all Commission requirements are met.

**Comment Summary:**

One commenter suggested that the Commission reword 10 CFR 73.55(t)(4) so that it says, “vehicle barrier systems alternative to those required by 10 CFR 73.55(e)(8),” rather than “alternative vehicle barrier systems required by 10 CFR 73.55(e)(8)”.

**NRC Response:**

The Commission agrees in part. The NRC has revised final rule text.

**Comment Summary:**

Regarding 10 CFR 73.55(t)(4)(i), one commenter stated that the term 'vehicle bomb' is too limiting. The commenter asked, "What if, instead of a bomb, the vehicle itself is used to cause the damage?" The commenter believes the Commission should delete the term 'bomb' from this section.

**NRC Response:**

The Commission agrees in part. The NRC has revised the final rule text consistent with 10 CFR 73.55(e)(8)(i) and 73.55(e)(8)(iv) for protection against the use of a vehicle as a means of transportation.



## **10 CFR 73.56 Responses to Public Comments**

### **Comment Summary:**

One commenter argued that the proposed Power Reactor Security Requirements Rule was utterly inadequate and that it was clear that the Commission had drawn the line at the point where nuclear power operators' profit margins might be significantly affected. This commenter noted that terrorists do not have such a constraint. He suggested that, if the Commission does not believe its licensees can afford the security upgrades necessary to protect the nation's nuclear reactors against the full potential threat, it must act with forthrightness and publicly demand that the Department of Homeland Security or the U.S. military assume responsibility for domestic nuclear power plant security. This commenter made several points that dealt with how terrorists could gain access to nuclear power plants and the very real threat that "insiders" pose.

### **NRC Response:**

The Commission disagrees with the commenter regarding the NRC beliefs about the licensees' ability to afford the security needed to protect the nation's nuclear reactors and the public health and safety and the common defense and security and disagrees with the commenter's contention that the NRC should demand that either the Department of Homeland Security or the U.S. military should assume responsibility for domestic nuclear power plant security. The Commission is aware that changes in security requirements will have varying degrees of expense. However, the Commission does believe that licensees subject to this rule are able to make the changes that are needed and that the benefits to the licensees, as well as to the public health and safety and the common defense, derived from the increased security will be well worth the cost of the changes.

### **Comment Summary:**

One commenter, supported by many other commenters, stated that the proposed 10 CFR 73.56(a)(1) requirement that each licensee submit its amended access authorization program to the NRC for review and approval would be a new requirement that goes beyond the requirements in the Access Authorization Order, dated January 7, 2003. That order allows each licensee to certify to the NRC that it has implemented an access authorization program that meets the NRC requirements. The commenter argued that a licensee should be allowed to certify to the NRC that its program is consistent with or exceeds the NRC-approved generic authorization program. This would result in significant resource savings for both the NRC and licensees and allow licensees to implement the amended program much earlier.

### **NRC Response:**

The Commission agrees with that each licensee can certify to the NRC that it has implemented an access authorization program that meets the NRC's requirements. The Commission finds that 10 CFR 50.54 or 10 CFR 50.90 provides regulations regarding whether the licensees are required submit changes to their Physical Security Plan. Therefore, the Commission has deleted the requirement in the proposed rule for each licensee to submit its amended program for NRC review and approval.

### **Comment Summary:**

One commenter, supported by many other commenters, stated that proposed 10 CFR

73.56(a)(6) did not make clear that only licensees and applicants can deny individuals access to a particular site. The commenter recommended that this proposed provision be revised to clearly state that, while licensees, applicants, and contractors/vendors should be able to maintain individuals' unescorted access authorization only licensees and applicants should be permitted to grant individuals unescorted access (UA) to their own nuclear power plant protected and vital areas, maintain such access, or deny such access.

**NRC Response:**

The Commission agrees with the comments that the authority over an individual's unescorted access to the protected and vital areas of a site is held only by that site's licensee. The Commission also agrees that greater clarity is needed about the relative roles and authorities of licensees and applicants versus contractor/vendors with regard to the access authorization programs and access determinations required by this rule. Therefore, the NRC has revised Section 73.56(a)(4) to make clear that only a licensee has the authority to grant unescorted access an individual.

Additionally, the Commission has revised Paragraph 73.56(a)(4) to allow both licensees and applicants to certify an individual unescorted access authorization and to permit to maintain, deny, terminate, or withdraw unescorted access authorization status. Although contractors or vendors do not have authority to grant or certify an individual unescorted access or unescorted access authorization, they can complete the access authorization program elements for licensees or applicants. Additionally, the contractors or vendors may maintain individuals' unescorted access or unescorted access authorization on behalf of the licensees and applicants, if the contractor access programs include the licensees or applicants approved behavior observation program. Because the licensees and applicants rely on the contractors and vendors to comply with the requirements of this section, the contractor access programs must comply with the requirements of this section.

**Comment Summary:**

One commenter, supported by many other commenters, stated that proposed 10 CFR 73.56(b) did not allow for short-term escorted digital access. The commenter noted that the industry presumes that defined permissions for supervised digital access for designated vendors/consultants are allowed in the same spirit as escorted physical access. The commenter argued that it is not practical to process all short-term computer support personnel through the access authorization program, and recommended that the rule allow these individuals to provide their expertise on a short-term, supervised basis.

**NRC Response:**

The Commission finds that the received comment regarding electronic escorted access is beyond the scope of this rule because this section specifically provides for requirements for unescorted access and unescorted access authorization for protected and vital areas of nuclear power plant. Therefore, the Commission did not revise the rule text.

**Comment Summary:**

One commenter, supported by other commenters, noted that licensees have no way to control access to off-site emergency response components that include commercial facilities, such as telephone switch stations, and that proposed 10 CFR 73.56(b) should be revised to reflect this.

**NRC Response:**

The NRC finds that the received comment is beyond the scope of this rule because this section

specifically provides for requirements for unescorted access and unescorted access authorization for protected and vital areas of nuclear power plants.

**Comment Summary:**

One commenter, supported by many other commenters, stated that proposed 10 CFR 73.56(d)(1)(i)(B) assumes all contractors/vendors have access to information through the information-sharing mechanism required under the proposed 10 CFR 73.56(o)(6). The commenter noted that the information-sharing mechanism has functioned for many years with approximately twelve contractors/vendors having access. Because the access decision for power reactor protected areas rests solely with the licensees, there is no reason for all contractors/vendors to have such access. The commenter recommended that the proposed 10 CFR 73.56(d)(1)(i)(B) be reworded to say that licensees “will,” but applicants and contractors/vendors “may” (as opposed to “will”), have access to information documenting the withdrawal through the information-sharing mechanism.

**NRC Response:**

The Commission agrees with the comments and has revised the proposed rule text in the final rule to reflect the received comments. As discussed in the response to comments received on proposed paragraph (a)(4), the term “applicant,” or “applicants,” in this section means only those applicants who have chosen to implement their access authorization program that comply with requirements set forth in this section prior to receiving their operating licenses or their NRC findings or nuclear fuel. Additionally, as explained in Paragraph (a) of this section, the term “contractors or vendor” means any entity or person as defined in 10 CFR 50.2 who maintains a contractor or vendor authorization program that has been approved by a licensee or an applicant who uses the contractor or vendor to complete its access authorization program elements that comply with requirements set forth in this section. These contractors or vendors may have access to information-sharing systems.

The Commission agrees that contractors or vendors may have access to the information sharing mechanism. Therefore, to provide additional clarifications, the Commission has revised the final rule text to state that the contractors or vendors may have the same access to the information, if such information is necessary to assist licensees or applicants to comply with the requirements set forth in section. Additionally, the Commission revised throughout the entirety of the final rule text to ensure that it does not inadvertently suggest that all contractors or vendors are required to access the information-sharing mechanism.

Finally, the Commission’s explanation of the term “applicant” or “applicants”, above, applies in response to all of the comments received on the proposed rule.

**Comment Summary:**

One commenter, supported by many other commenters, noted that when an individual withdraws his or her consent for a background investigation, the industry does not record the reason for the withdrawal in its information sharing mechanism because the reason is not pertinent for any access determination. Therefore, the commenter recommended deleting the proposed 10 CFR 73.56(d)(1)(ii) requirement that the individual’s reason for withdrawing consent be recorded in the information sharing mechanism. The commenter also noted that contractors and vendors currently do not have data entry capabilities for the data-sharing mechanism.

**NRC Response:**

The Commission agrees with the received comment that access authorization status information is recorded in the information sharing mechanism, instead of collected records. Additionally, the Commission agrees with the commenters regarding contractors or vendors accessing the information sharing mechanism. The intent of the proposed rule was not to require all contractors or vendors to directly input or update records in the information sharing mechanism. However, the contractor or vendor may assist licensees or applicants if assistance is requested by them. Therefore, the Commission revised the final rule text to require that the status of individual's application for access authorization for licensees or applicants is recorded to the information sharing mechanism accordance with Paragraph o(6) of this section.

**Comment Summary:**

One commenter, supported by many other commenters, recommended that proposed 10 CFR 73.56(d)(2)(ii) be deleted from the final rule. They noted that, currently, licensees indicate administrative withdrawals in the information-sharing mechanism. This prevents the individual from beginning the access authorization process at another licensee until that licensee communicates with the licensee who indicated the administrative withdrawal.

The commenter also noted that the licensee that originally entered the administrative withdrawal indication removes it from the information sharing mechanism when appropriate. If the individual is subsequently denied or terminated unfavorably, that information is entered in the information-sharing mechanism and the administrative withdrawal indication is removed. The commenter claimed that there was no need for the proposed 10 CFR 73.56(d)(2)(ii) requirement because all administrative withdrawal indications are removed from the information-sharing mechanism when appropriate. He also expressed concern that the Commission was attempting to prescribe very specific requirements that are contrary to the logical functioning of the information sharing mechanism that has been developed, tested, and proven over the last decade.

**NRC Response:**

The NRC agrees with the comments that licensees remove administrative withdrawal indication from the information-sharing mechanism, when appropriate. However, the NRC finds that the final rule text must maintain the intent of the former rule that addresses concerns regarding inadvertent sharing of information that is no longer applicable to an individual who is seeking unescorted access at a nuclear facility. Therefore, the Commission has revised the final rule text to incorporate the comment and maintain the intent of the former rule.

The Commission finds that the current industry practice to share a temporary or administrative state of individuals' access authorization status among licensees, applicants, and contractors or vendors is a necessary part of access authorization program. However, the NRC also is concerned that old or stale information that is no longer applicable to the individual would inadvertently be shared. Therefore, the NRC has revised the final rule text to maintain the intent of the original language and preserve the industry's current practice.

**Comment Summary:**

One commenter, supported by many other commenters, stated that proposed 10 CFR 73.56(d)(3) did not fully address the legal avenues that foreign nationals have for performing work supporting licensees in the United States. For example, under the North America Free Trade Agreement (NAFTA), Canadians performing certain services for a Canadian-based company require neither an alien registration nor an I-94 Form to be in the United States legally.

For certain Federal government databases, immigration status verification cannot be performed without an alien registration number or an I-94 Form. Additionally, many contract workers supporting licensees require access either the day of or the day after arriving in the United States. All aliens are issued an admission number when they enter the United States. But processing of I-94 Form paperwork by the Federal government often does not yield an immigration status validation result until up to 10 business days following the worker's arrival in the United States.

The commenter suggested that the proposed 10 CFR 73.56(d)(3) be revised to require licensees and applicants to validate the "the claimed immigration status" rather than "the alien registration number that the individual provides." The commenter also recommended that contractors and vendors be eliminated from proposed 10 CFR 73.56(d)(3) because, as provided in proposed 10 CFR 73.56(a)(6), contractors and vendors do not grant unescorted access. Also, the commenter noted that proposed 10 CFR 73.56(d)(3) incorrectly referred to fingerprinting being required under 10 CFR 73.21.

**NRC Response:**

The Commission agrees with the received comments regarding claimed immigration status. NAFTA allows Canadians performing certain services to enter the United State without either an alien registration or an I-94 Form. Additionally, the Commission agrees with the commenters that the proposed rule text incorrectly allowed contractors or vendors to evaluate the results of fingerprinting required under 10 CFR73.56. Although contractors or vendors may conduct local criminal history check, Section 149 of Atomic Energy Act prohibits them from evaluating the results of fingerprinting required under 10 CFR part 73.57. Finally, the NRC agrees with the commenters that the proposed rule incorrectly references 10 CFR 73.21. Therefore, the NRC has revised the proposed rule text in the final rule to cover foreign nationals who entered the United States under NAFTA, to correct errors in referencing fingerprinting requirements, and to delete contractors or vendors from evaluating the criminal history records obtained in accordance with 10 CFR 73.57.

**Comment Summary:**

One commenter, supported by many other commenters, stated that proposed 10 CFR 73.56(d)(4)(iii) went beyond the requirements of the Access Authorization Order, dated January 7, 2003. The commenter stated that the industry's experience indicates that compliance with proposed 10 CFR 73.56(d)(4)(iii), requiring the licensee, applicant, or contractors/vendors to verify that an individual had actively participated in the education process would be difficult at best and, at times, impossible. Thus, the commenter recommended that the Commission revise 10 CFR 73.56(d)(4)(iii) by replacing the phrase "verify that the individual was actively participating in the education process during the claimed period" with "verify that the individual was actually registered for class during the claimed period".

**NRC Response:**

In general, the Commission agrees with the commenters that verifying that an individual had actively participated in the education process would be difficult. The intent of this requirement was for licensees, applicants, and contractors or vendors to verify that the individual who applied for either unescorted access or unescorted access authorization was registered for the classes and received grades that indicate that the individual actively participated in school during the claimed period(s). Therefore, the Commission has revised the proposed rule text in the final rule to reflect the intent of this rule.

**Comment Summary:**

One commenter, supported by many other commenters, stated that the proposed 10 CFR 73.56(d)(4)(vi) was more stringent than the related requirements in the Access Authorization Order, dated January 7, 2003. The commenter interpreted 10 CFR 73.56(d)(4)(vi) to require that licensees, applicants, and contractors/vendors must keep all documents gathered during the employment history evaluation. The commenter noted that this paragraph referred to the proposed 10 CFR 73.56(o), and that 10 CFR 73.56(o)(2)(i) and (ii) clearly required retention of only those records actually used in the access determination. The commenter recommended that the Commission revise 10 CFR 73.56(d)(4)(vi) to make it consistent with the more limited requirements of 10 CFR 73.56(o)(2)(i) and (ii).

**NRC Response:**

The NRC disagrees with the comment that the recordkeeping requirement set forth in this paragraph is inconsistent with 10 CFR 73.56(o) and 10 CFR 73.56(o)(2)(i). The proposed rule text specifically requires licensees, applicants, or contractors or vendors to retain the records and any documents or electronic files obtained electronically. Additionally, this requirement is consistent with related requirements in 10 CFR Part 26.

**Comment Summary:**

One commenter, supported by many other commenters, said that the industry did not take issue with proposed 10 CFR 73.56(d)(5) that required an evaluation of the credit history of an individual applying for access. The commenter noted, however, that it is important to recognize that information in credit reports provided by credit reporting agencies may not agree with information provided by individuals. Given this potential for inconsistency, he thought that reviewing officials should use data provided by credit reporting agencies in the context of the other information developed during the access process.

Also, the commenter stated that proposed 10 CFR 73.56 had no requirement for evaluating the credit history of a foreign national and suggested that the rule require a financial responsibility inquiry for unescorted access authorization applicants with a residence of record in a foreign country and who have not established a record of credit in the United States.

The commenter further suggested that, if no routinely accepted credit reporting mechanism is available in the applicant's country of recorded residence, a statement of responsibility concerning the individual's financial record from an entity within that country should be considered acceptable.

In addition, the commenter argued that the term "full credit history evaluation" was ambiguous. He recommended that the NRC delete the word "full" and specify a required specific credit history time period for industry to use and provide justification for it. Lastly, the commenter noted that fraud checks are not available from the national credit-reporting agencies.

**NRC Response:**

The Commission agrees in part with the comments. The Commission agrees with the comments that the information in credit reports may not match the information provided by individuals and that the reviewing official should interpret the credit history information within the context of all the information developed during the access authorization process. This is consistent with the Commission's intent.

The Commission also agrees that the credit history of foreign nationals and individuals without

an established credit history in the United States should be evaluated, and that multiple sources could potentially provide information about an individual's financial record and responsibility, including, but not limited to, routinely accepted credit reporting mechanisms. Thus, the NRC has revised the final rule text to provide requirements for individuals, such as foreign nationals and United States citizens who have resided outside the United States, who have not established credit history in the United States.

However, the Commission disagrees with the commenter concerning the benefit and feasibility of conducting full credit history evaluations and the role of credit history information in identifying patterns of fraud and misuse of financial identifiers. Additionally, the Commission disagrees with the recommendation that the regulations should specify and justify a specific time period for credit history evaluation. The NRC issued additional clarification regarding a full credit history check in Regulatory Issue Summary 2005-14, "Clarification of implementing Guidance for Compensatory Measures Related to Access Authorization".

This full credit history evaluation is consistent with current industry practice. The full credit history evaluation requirement reflects the Commission's intent that all financial information available through credit-reporting agencies is to be obtained and evaluated. Experience has shown that the information available from credit sources varies in the time period covered, depending upon the individual and the information source. Because these records can reveal patterns of fraud or misrepresentation that are of particular value in assessing an individual's trustworthiness and reliability, the Commission has concluded that it is important to obtain and evaluate all available information of this type.

The Commission also disagrees with the commenter's interpretation that the proposed rule indicates that credit reporting agencies conduct fraud checks. Rather, the Commission is making the point that evaluation of information obtained through a request for a full credit history on an individual may reveal fraud and misrepresentation or misuse of financial identifiers.

**Comment Summary:**

One commenter, supported by many others, stated that proposed 10 CFR 73.56(e)(1) required that a clinical psychologist or psychiatrist conduct the psychological assessment. The commenter assumed the rule's intent was to ensure that the individual performing the professional work was properly trained and experienced in conducting psychological assessments. However, he reported that a sample of state licenses for psychologists found no states that specifically licensed "clinical psychologists." Therefore, the commenter recommended that proposed 10 CFR 73.56(e)(1) be revised to specify that psychological assessments be conducted by a psychologist who has adequate experience, rather than the more specific requirement of a clinical psychologist.

**NRC Response:**

The Commission agrees with assumption that intent of the rule was to ensure that the individual performing the professional work was properly trained and experienced. Additionally, the NRC agrees with the commenter that some states license psychologists or psychiatrists instead of clinical psychologists or psychiatrists. Therefore, the Commission revised the final rule text to require "a licensed psychologist or psychologist with the appropriate training or experience" to conduct the psychological assessment.

**Comment Summary:**

One commenter, supported by many other commenters, stated that proposed 10 CFR

73.56(e)(2) required that psychological assessments be conducted in accordance with the applicable ethical principles established by the American Psychological Association or American Psychiatric Association. The commenter noted that the Commission discussion recognized that, to meet state licensure requirements, clinical psychologists and psychiatrists are required to practice in accordance with applicable professional standards but did not require that clinical psychologists and psychiatrists practice in accordance with American Psychological Association or American Psychiatric Association ethical principles. The commenter stated that the industry was concerned that licensees may not be able to use licensed and fully qualified clinical psychologists and psychiatrists because their practices, while ethical, deviate slightly from the ethical principles of the relevant association. The commenter concluded that it would be inappropriate for the Commission to mandate that any professional practice adhere to a canon of ethics which might deviate from the demands of the State Board that granted their license. Thus, the commenter recommended that the Commission revise 10 CFR 73.56(e)(2) to state that the psychological assessment must be conducted in accordance with the applicable ethical principles for conducting such assessments established by the State Board granting licensure to the psychologist or psychiatrist.

**NRC Response:**

The NRC disagrees with the comments because the ethical principles established by the American Psychological Association or American Psychiatric Association address the issues raised by the comments. Specifically, these ethical standards require psychologists and psychiatrists to comply with the requirements of laws, regulations (including requirements in Section 73.56), or other governing legal authorities. Thus the Commission finds that the requirements set forth in this section will not limit the pool of available licensed and qualified psychologists and psychiatrists who can perform the required psychological assessments.

**Comment Summary:**

Another commenter stated that the requirement in 10 CFR 73.56(e)(2) that the professionals conducting the psychological testing follow both the American Psychological Association and American Psychiatric Association ethical principles may conflict with the requirement in proposed 10 CFR 73.56 (e)(3) that a face-to-face interview may be conducted only after an individual surpasses predetermined thresholds on a psychological test.

The commenter noted that in Section 9.02a on “Use of Assessments” of the American Psychological Association's June 1, 2003, version of its “Ethical Principles of Psychologists and Code of Conduct,” it is clear that “Psychologists administer, adapt, score, interpret or use assessment techniques, interviews, tests, or instruments in light of the research on or evidence of the usefulness and proper application of the techniques.” The commenter said that tests like the MMPI-2, California Personality Inventory, or the Personality Assessment Inventory were designed for broad use to detect psychopathology. The commenter questioned whether there is any research that supports the use of these types of tests in settings where the motivation to fake good is high. He also questioned whether there is any research to show a connection between these tests and job requirements like trustworthiness and reliability that might be necessary to avoid violating federal legal protections under the “Americans with Disabilities Act.”

Lastly, the commenter stated that Section 2.01 of the APA Ethical Principles stresses that psychologists perform work only for those purposes that they are trained and properly supervised. The commenter said that, while all clinical psychologists receive training in administering tests that detect psychopathology, not many are familiar with applying these tests in national security settings where they are being asked to show a connection between test



results and the concepts of “trustworthiness” and “reliability” that the Commission is primarily interested in. The commenter asked whether there is a training program or a certification process in place for licensed psychologists or psychiatrists doing these personnel screenings.

**NRC Response:**

The NRC disagrees with the commenter that the proposed requirements prevent the professionals providing psychological assessment services from conducting a clinical interview with an individual, because 10 CFR 73.56(e)(3) does not impose such a prohibition. Therefore, the Commission finds that 10 CFR 73.56(e)(3) is not in conflict with 10 CFR 73.56(e)(2).

In reference to the concern that there must be sufficient demonstrated ability of psychological tests to shed light on a person’s trustworthiness and reliability and to comply with the Americans with Disabilities Act standards, the Commission directs the commenter’s attention to the considerable body of research and the reasonably long track record of intelligence and other agencies using the MMPI-2 as well as other personality tests for this purpose. Additionally, psychological assessment is one of many access authorization program elements that licensees and applicant use for determining individual’s trustworthiness and reliability. Therefore, the Commission is confident that results of psychological testing and the results of other access authorization program elements will provide high assurance regarding individual’s trustworthiness and reliable.

**Comment Summary:**

One commenter, supported by many other commenters, stated that 10 CFR 73.56(e)(3) would create requirements beyond those of the Access Authorization Order, dated January 7, 2003. The commenter noted that the provision requires “predetermined thresholds” to be applied in interpreting the results of the psychological test. The commenter argued that it would be completely inappropriate for the industry to set a professional clinical threshold for test performance to determine whether an individual shall be interviewed by a psychiatrist or licensed clinical psychologist as the proposed 10 CFR 73.56(e)(3) appeared to require.

The commenter suggested that the psychiatrist or psychologist should establish predetermined thresholds appropriate to the test and the target population that would be applied in interpreting the results to identify whether an individual shall be interviewed under paragraph (e)(4)(i) of this section. Further, the commenter stated that in some cases the psychiatrist or licensed psychologist should be allowed to interview the individual without administering the test if, in the professional opinion of the psychiatrist or licensed clinical psychologist, the test would provide little meaningful information.

The commenter concluded that it is not appropriate for the Commission to dictate practice requirements for professionals licensed by the various states. Thus, the commenter recommended that the Commission revise 10 CFR 73.56(e)(3) by adding the clause “unless waived” after “the psychological assessment must.” Also, the commenter recommended that the NRC replace the second sentence in the proposed provision with “A psychiatrist or licensed psychologist may waive the test and proceed directly with the interview if in his opinion the test would provide little meaningful information”.

**NRC Response:**

The NRC agrees that the predetermined threshold for each scale should be applied to the test established by a licensed and appropriately trained and/or experienced psychologists or psychiatrists following the applicable ethical principles for conducting such assessments

established by the American Psychological Association or American Psychiatric Association. The psychologists or psychiatrists who conduct the psychological evaluations are expected to be skilled in the administration of the tests they are using and are expected to have the knowledge and experience to select or develop the thresholds that are pertinent and effective for the purposes of the evaluation and the population being evaluated.

Finally, the predetermined threshold for each scale must be applied equally and fairly to all individuals subject to the psychological assessment requirement. Thus the Commission does not agree that the psychologist or psychiatrist should be able to waive the test and proceed directly with the interview if the psychologist or psychiatrist documents his or her opinion that the test would provide little meaningful information.

**Comment Summary:**

Another commenter stated that it is not enough to simply have predetermined thresholds on a psychological test. The commenter stated that whoever does the psychological testing must also review individual test items that may be of concern and review a life history questionnaire completed by each individual. Based on answers to particular questions of concern the individual may need to be evaluated face-to-face, whether or not his scale score meets the predetermined threshold. Also, the commenter noted that the substantial variability in the thresholds used by authorization programs in the past to determine whether an individual's test results provided indications of personality disturbances or psychopathology is a significant concern.

The commenter argued that setting predetermined thresholds is only a partial solution. In his view, the best way to reduce this variability across programs is to ensure that all licensed psychologists and psychiatrists are adequately trained and/or certified in applying their clinical assessment knowledge to this arena where “trustworthiness” and “reliability” are important concepts that may mean different things to different clinicians.

**NRC Response:**

The NRC agrees that requiring predetermined thresholds is not a complete solution and may not produce consistency across licensee programs, but does expect that it will increase consistency in this aspect within a licensee's program. Finally, the NRC agrees with the recommendation to reduce inconsistencies among programs by ensuring that all licensed psychologists and psychiatrists are adequately trained and/or certified in applying their clinical assessment knowledge to this arena where “trustworthiness” and “reliability” are important concepts that may mean different things to different clinicians. The recommended solution is consistent with the requirements set forth in Paragraph 73.56(e)(1) of the final rule text that requires licensed psychologists and psychiatrists to be properly trained.

**Comment Summary:**

One commenter, supported by many other commenters, stated that proposed 10 CFR 73.56(e)(5) would create requirements beyond those of the Access Authorization Order, dated January 7, 2003. The commenter argued that proposed 10 CFR 73.56(e)(5) was very limiting and prescriptive in that it would force the reviewing official to be the focal point for the discussion of medical-related information.

The commenter recommended that this section be modified because premature involvement of the reviewing official may cause problems, such as ensuring that the right information is communicated back and forth between the psychologist or psychiatrist and medical doctor,

which would require development of a documentation tool. The commenter stated that knowledgeable professionals should discuss the issues and provide a recommendation to the reviewing official. According to the commenter, licensees, applicants and contractors and vendors can develop a process to achieve this goal.

**NRC Response:**

The Commission agrees that the reviewing official may not need to be the focal point for the discussion of medical-related information. A knowledgeable professional may provide results of his or her evaluation and recommendations regarding the individual to the reviewing official. However while developing a response to the comments, the Commission recognized that the proposed rule does not provide clear regulations other than initial psychological testing. The Commission finds that in order to maintain high assurance that each person granted unescorted access to the protected and vital areas is trustworthy and reliable and does not constitute an unreasonable risk to the health and safety of the public or the common defense and security, the psychological assessment regulations need to include requirements for those individuals who are granted unescorted access to protected or vital areas or are certified unescorted access authorization.

For these individuals, the reviewing officials need to reassess their trustworthiness and reliability when the psychologist or psychiatrist discovers any information that can adversely impact the individual's fitness for duty or trustworthiness and reliability. Therefore, the Commission has added paragraph (e)(6) to provide requirements beyond initial psychological testing.

**Comment Summary:**

One commenter asked the Commission to revise 10 CFR 73.56(f) to provide specific guidance on if or how someone will be psychologically screened if his or her access is suspended or removed for, say, abnormal behavior reported under the behavioral observation program.

**NRC Response:**

The NRC disagrees with this comment. The Commission finds that such specific guidance is provided in the regulatory guide and/or plant procedures, not in the rule itself.

**Comment Summary:**

One commenter, supported by many other commenters, stated that 10 CFR 73.56(f)(3) would create requirements beyond those of the Access Authorization Order, dated January 7, 2003. The commenter objected to the 10 CFR 73.56(f)(3) requirement that individuals report concerns arising from behavioral observation, such as those related to any questionable behavior patterns or activities of others, to the reviewing official. The commenter questioned the NRC's justification for this requirement and reported that, in the industry's experience, it is much more likely that concerns reported to supervisors are, in fact, subsequently reported to the reviewing official than not reported.

In the commenter's view, this new requirement would actually reduce the number of concerns reported because individuals often do not know who the reviewing official is. Furthermore, the commenter thought that industry employees' increased security consciousness since September 11, 2001, has made them more conscientious about reporting such concerns. For these reasons, the commenter recommended that proposed 10 CFR 73.56(f)(3) be revised to allow individuals subject to access authorization programs to have the option of reporting such concerns to the reviewing official, their supervisor, or other management personnel, as specified in site procedures.

**NRC Response:**

The Commission agrees, in part, with the above recommendation. The Commission agrees that that individuals should be able to report their concerns arising from behavioral observations to the reviewing official, the individual's supervisor, or other management personnel designated in their site procedures. However, the Commission disagrees that individuals subject to access authorization programs only report their concerns to individuals specified in the site procedures.

The objective of this requirement is to ensure that the reviewing official is promptly informed of circumstances or conditions that may have the potential to have an adverse impact on the trustworthiness and reliability determination related to that individual. Thus any necessary action regarding the individual's access authorization can be taken without delay. The timely review of this information will ensure, to the degree possible, that the reported individual will not constitute an unreasonable risk to the public health and safety and the common defense and security. If the recipient of the report is someone other than the reviewing official, that person must promptly convey the report to the reviewing official, who shall determine whether to maintain, administratively withdraw, or unfavorably terminate the reported individual's unescorted access or unescorted access authorization status.

Therefore, the Commission has revised the proposed rule text in the final rule to allow individual to report their concerns arising from behavioral observations to supervisors or managers who have the responsibility to report the concerns to the reviewing official.

**Comment Summary:**

One commenter, supported by many other commenters, stated that 10 CFR 73.56(g) would create requirements beyond those of the Access Authorization Order, dated January 7, 2003. The commenter objected to the 10 CFR 73.56(g) requirement that individuals report to the reviewing official "...any formal action(s) taken by a law enforcement authority...to which the individual has been subject..." He questioned the Commission's justification for this requirement and reported that, in the industry's experience, it is much more likely that arrests or other legal actions reported to supervisors are, in fact, subsequently reported to the reviewing official than not reported. In the commenter's view, this new requirement would actually reduce the number of arrests reported because individuals often do not know who the reviewing official is. For these reasons, the commenter recommended that 10 CFR 73.56(g) be revised to allow individuals subject to access authorization programs to have the option of reporting such legal actions to either the reviewing official, their supervisor, or other management personnel, as specified in site procedures.

**NRC Response:**

The Commission agrees in part with this comment. The Commission agrees that that individuals should be able to report legal actions to the reviewing official, the individual's supervisor, or other management personnel designated in their site procedures. However, the Commission disagrees that individuals subject to access authorization programs only report their legal actions to the individuals specified in the site procedures.

The objective of this requirement is to ensure that the reviewing official is promptly informed of circumstances or conditions that may have the potential to have an adverse impact on the trustworthiness and reliability determination related to that individual. Thus any necessary action regarding the individual's access authorization can be taken without delay. The timely

review of this information will ensure, to the degree possible, that the reported individual will not constitute an unreasonable risk to the public health and safety and the common defense and security. If the recipient of the report is someone other than the reviewing official, that person must promptly convey the report to the reviewing official, who shall determine whether to maintain, administratively withdraw, or unfavorably terminate the reported individual's unescorted access or unescorted access authorization status.

Therefore, the Commission has revised the proposed rule text in the final rule to allow individual to report their legal actions to supervisors or managers who have the responsibility to report the concerns to the reviewing official.

**Comment Summary:**

Two people jointly commented that the 10 CFR 73.56(g) requirement that individuals who have applied for or are maintaining unescorted access authorization report to the reviewing official "any formal action(s) taken by a law enforcement authority" was overly broad and would set workers up for retaliation by management. The commenters noted that, at a public meeting, the NRC acknowledged that the intent of this provision did not apply to, for example, such minor infractions as speeding or parking tickets. However, proposed 10 CFR 73.56(g) itself did not exclude such minor infractions. The commenters concluded that this requirement could be abused by licensees in their campaign to rid workplaces of people raising safety concerns and that the Commission must not make it easier for its licensees to retaliate against workers who raise safety concerns.

**NRC Response:**

The NRC agrees with the commenters that the term "any formal action(s)" is overly broad and has revised 10 CFR 73.56(g) in the final rule to clarify that individuals subject to an access authorization program are required to report only legal actions that could result in incarceration or a court order or that require a court appearance, including but not limited to an arrest, an indictment, the filing of charges, or a conviction, but excluding minor misdemeanors such as parking or speeding tickets.

**Comment Summary:**

One commenter, supported by many other commenters, stated that some aspects of 10 CFR 73.56(h)(4) would create requirements beyond those of the Access Authorization Order, dated January 7, 2003. The commenter also noted that, while 10 CFR 73.56(h)(4) required licensees, applicants, and contractors/vendors to take actions as specified in physical security plans, the NRC-approved physical security plans do not direct specific actions for the access program. Rather they mention that access actions are to be taken in accordance with the industry standard access program, which sites have typically converted to their own access programs.

Thus, the commenter recommended that proposed 10 CFR 73.56(h)(4) be revised to provide that, if potentially disqualifying information is disclosed or discovered about an individual, action is to be taken in accordance with the licensee's or applicant's access program or implementing procedures rather than its physical security plan.

**NRC Response:**

In general, the Commission agrees with the comment. To increase clarity in the organizational structure of the requirements set forth in proposed paragraphs h(3), (h)(4), h(5), h(6), and (h)(7), the Commission combined those paragraph into (h)(4) in the final rule text. During this update, the Commission deleted the rule text concerning potentially disqualifying information that is

disclosed or discovered about an individual, because paragraph (h)(3) of the final rule provides regulation regarding the disclosed and discovered information. Specifically, paragraph (h)(3) of the final rule requires the licensee's or applicant's reviewing official to evaluate all of the information required by this section prior to granting an individual unescorted access or certifying an individual unescorted access authorization.

**Comment Summary:**

One commenter, supported by many other commenters, stated that some aspects of proposed 10 CFR 73.56(h)(8) would create requirements beyond those of the Access Authorization Order, dated January 7, 2003. The commenter also said that the industry agreed with the 10 CFR 73.56(h)(8) requirement that the decision to grant or maintain unescorted access authorization shall not be made until all of the required information has been provided to the reviewing official. The commenter stated, however, that the decision to deny or terminate such authorization should be made as soon as the reviewing official receives information that would warrant such a decision, even if the reviewing official has, at that point, not acquired all the information required by 10 CFR 73.56.

Additionally, the commenter noted that industry and the NRC have used the word "determination" to characterize this decision, but contrary to this established practice, the final sentence of proposed 10 CFR 73.56(h)(8) calls this decision a "positive finding." Thus the commenter recommends changing the terms to "determination of trustworthiness and reliability." The commenter also suggested revising this section so that it would apply to licensees and applicants but not to contractors and vendors.

**NRC Response:**

The Commission agrees with the comment that, if a reviewing official has disqualifying information regarding an individual, the reviewing official should make the access determination. Therefore, the Commission has revised the proposed rule text in the final rule to reduce unnecessary regulatory burden by providing licensees and applicants the flexibility to terminate the process upon receipt of disqualifying information. To increase the clarity in the organizational structure of the requirements set forth in paragraph (h), the Commission moved paragraphs (h)(1), (h)(2), (h)(8), (h)(9), and (h)(10) to paragraphs h(5), h(6), (h)(1), (h)(2), and h(3), respectively, in the final rule.

**Comment Summary:**

One commenter, supported by many other commenters, stated that this provision requires licensees to grant access to individuals certified by the NRC but does not provide details about certification nor state that the certification process shall be consistent regardless of which NRC office or region provides it. The commenter recommended that the final rule should require a consistent certification process, with the certifications originating from a small group within the NRC identified beforehand to licensees.

**NRC Response:**

The NRC disagrees with the comment because the certification requirements set forth in the proposed 10 CFR 73.56(h)(9) are consistent with long-standing NRC- practice. 10 CFR 73.56(c)(3), in the former rule, required licensees to grant unescorted access to individuals who have been certified by the NRC as suitable for such access. To assist licensees in meeting this requirement, each Regional Office has a Division of Resource Management and Administration (DRMA) and has developed a procedure and a licensee site visit notification letter to notify nuclear power plant sites of visits by NRC employees and NRC contractors. The site visit

notification letter contains a visiting individual's name, badge number, and clearance. The need for site specific training is usually determined by the licensee when the NRC employees and NRC contractors first arrive at a site. Thus, any licensee who has concerns or questions regarding NRC employees' or contractors' site visits can easily and promptly have the issues addressed or questions answered by contacting their Regional DRMA representative.

**Comment Summary:**

Two commenters jointly stated that proposed 10 CFR 73.56(h)(10) would allow individuals known to be escaped felons or on the terrorist list to be escorted into protected and vital areas. The commenters said that the intention to prevent individuals who have formally been denied unescorted access to a nuclear power plant from entering a nuclear power plant as a visitor is commendable, but this provision was too narrowly defined. The commenters noted that there have been cases, as the NRC is aware, where licensees have come across derogatory information during background checks that would have resulted in unescorted access being formally denied, but stopped the process at that point and simply escorted the individuals into the protected area anyway.

The commenters recommended that the NRC regulations must prevent licensees possessing derogatory information about individuals that would prevent them from being granted unescorted access from allowing said persons inside the protected area fence even as escorted visitors.

**NRC Response:**

The Commission disagrees with the comment. The Commission finds that the proposed regulations include the following provisions to address the commenter's security concerns regarding a licensee allowing an individual to be escorted in its nuclear power plant protected area after a licensee has discovered derogatory information about the individual while processing the individual's unescorted access application:

1. 10 CFR 73.56(d)(1)(ii) requires licensees to complete background investigation elements once they are initiated and to record the findings and the individual's access authorization status. The collected information (such as derogatory information) is shared with other licensees.
2. 10 CFR 73.56(h)(1) requires licensees to evaluate all the information specified in 10 CFR 73.56 before its reviewing official determines whether an individual is trustworthy and reliable. However, it allows licensees to deny anyone as soon as it obtains disqualifying information about an individual.

Therefore, the Commission finds that the rule is adequate in addressing this comment. Finally, the Commission finds that the comment regarding allowing individuals known to be escaped felons or on the terrorist list to be escorted into protected and vital areas of nuclear power plants, is beyond the scope of this section. This section specifically provides regulations regarding individual's unescorted access and unescorted access authorization. The NRC regulations regarding escorted access are sufficiently addressed in 10 CFR 73.55.

**Comment Summary:**

One commenter, supported by many other commenters, stated that the provision requires licensees and applicants to develop reinstatement review procedures for assessing individuals who have been in an access denied status, but power reactor licensee procedures already

require such an assessment. Thus, the commenter recommended that the Commission revise 10 CFR 73.56(h)(10) to state: "Licensees and applicants may not permit an individual, who is identified as having an access-denied status in the information-sharing mechanism required under paragraph (o)(6) of this section, or has an access authorization status other than favorably terminated, to enter any nuclear power plant protected area or vital area, under escort or otherwise, or take actions by electronic means that could impact the licensee's operational safety, security, or emergency response capabilities, under supervision or otherwise, except upon completion of the initial unescorted access authorization process, if the Reviewing Official determines that such access is warranted".

**NRC Response:**

The Commission agrees that the regulation that requires licensees and applicants to develop reinstatement review procedures for assessing individuals who have been in an access denied status is unnecessary, because paragraph (h)(3) provides requirements regarding such individuals. Therefore, the Commission deleted this requirement from the final rule.

**Comment Summary:**

One commenter, supported by many other commenters, stated that 10 CFR 73.56(i)(1)(iv) incorrectly indicated that a licensee's Physical Security Plan contains details about the Behavioral Observation Program (BOP). In fact, BOP documents, not the Physical Security Plan, contain these details. Therefore, the commenter recommended that 10 CFR 73.56(i)(1)(iv) be revised by substituting "Behavior Observation Program" for "Physical Security Plan" as the source of BOP details.

The commenter also noted that this section required that individuals be subject to a "supervisory interview" rather than to a "supervisory review." The commenter said that this wording was inconsistent with the industry's practice of basing the annual supervisory review on the year's interactions between the supervisor and the individual, not on just a single interview. Because the industry believes that the Commission intended that it continue with this effective current practice, the commenter recommended that the section be revised by indicating that the individual is to be subject to a "supervisory review" rather than to a "supervisory interview."

Lastly, the commenter stated that the word used in NRC-approved industry documents regarding the frequency of the review is "annual" rather than "nominal 12-month." Therefore, he recommended that 10 CFR 73.56(i)(1)(iv) be revised to substitute "annual" for "nominal 12-month".

**NRC Response:**

The Commission agrees with the comments regarding the incorrect characterization of the Physical Security Plans and the details of the BOP. The Commission finds that details of behavior observation are described in the access authorization program instead of plants' Physical Security Plan. Therefore, the Commission revised the final rule text to correct this error.

With regard to the comment concerning use of the term "nominal 12-month" rather than "annual," The Commission agrees in part with this comment. The intent of this requirement is that the supervisory review/interview be conducted on a nominal annual basis for each individual with unescorted access authorization or unescorted access maintained for 365 consecutive days. The periodicity of the annual supervisory interviews/reviews is consistent with the current industry practice.



Finally, with regard to the recommendation to replace the term “interview” with “review,” the Commission agrees in part with the comment. Specifically, the Commission disagrees that all supervisors have sufficient information about all of their employees due to current workforce practices and trends making close interaction between supervisors and their employees and close observation by supervisors less common and difficult to achieve. The Commission recognizes that there are many instances in which supervisors will have sufficient information about an individual through frequent observations and interactions with their employees over the course of the review period. Therefore, the NRC revised the final rule to address both the instances where supervisors have and do not have sufficient information about an individual over the course of the review period.

**Comment Summary:**

One commenter, supported by many other commenters, noted that that requiring a psychological reassessment of individuals within five years of the date on which such an assessment was last completed goes beyond the requirements of the Access Authorization Order, dated January 7, 2003. The commenter stated that requiring five-year psychological reassessments will have significant cost and negligible benefit. The commenter argued that, since all other aspects of the access authorization requirements are repeated at the five-year interval already, and the BOP is continuous, this obviates the need for such a reassessment for an individual maintaining access.

Another commenter noted that the Commission has concluded repeatedly that the current requirements provide high assurance of mitigation for various aspects of the insider threat and has not provided justification for this new requirement. Yet another commenter added that in the statement of considerations the Commission noted that this proposed requirement provides consistency with other entities that need trustworthy and reliable employees but does not specify with which entities consistency will be achieved. This commenter stated that no other justification or benefit of the new and burdensome requirement was discussed in the Federal Register Notice or in the Draft Regulatory Analysis. Thus, with no obvious benefit for a very costly requirement, the commenters strongly recommended that the Commission delete the proposed requirement from the final rule.

**NRC Response:**

The Commission agrees, in part, regarding the proposed 5-year psychological reassessments. The Commission agrees that requiring psychological evaluation as part of the 5-year review for all individuals maintaining unescorted access or unescorted access authorization status will add significant costs and deviates from the intent of the current requirements. Therefore, to minimize the unnecessary regulatory burden on licensees and to maintain the intent of the previous regulations, the Commission has revised the final rule text to limit the group of individuals who are subjected to 5-year psychological reassessments to those individuals who perform job functions that are similar to the group of individuals who are currently identified as warranting psychological assessment every 5 years. Specifically, the groups of individuals that require 5-year psychological reassessments are those individuals who have one or more following job functions:

Any individual who has extensive knowledge of defensive strategies and design and/or implementation of the plant’s defense strategies, including

- Site security supervisors
- Site security managers

- Security training instructors
- Corporate security managers

Any individual in a position to grant an applicant unescorted access or unescorted access authorization, including

- Site access authorization managers

Any individual assigned a duty to search for contraband (i.e., weapons, explosives, incendiary devices)

Any individuals who secures plant networks or security system networks, or have extensive knowledge of plant networks, or have administrative control over the plant networks, including

- Plant network systems administrators
- IT personnel who are responsible for securing plant networks.

Any individual qualified for and assigned duties as: armed security officers, armed responders, alarm station operators, and response team leaders as defined in the licensee's physical security plan; and reactor operators, senior reactor operators and non-licensed operators. Non-licensed operators include those individuals responsible for the operation of plant systems and components, as directed by a reactor operator or senior reactor operator. Non-licensed operators also monitor plant instrumentation and equipment and principally perform their duties outside of the control room.

The Commission disagrees with the assertion that the BOP obviates the need for a psychological reassessment. The BOP provides a way to detect an individual's emotional and/or psychological state at a given point in time. It is not designed to identify changes in individuals' overall psychological well-being. Thus, the Commission finds that a psychological reassessment is warranted for those individuals who perform job functions that pose a threat similar to those job functions that are currently required to be psychologically assessed every 5 years.

Finally, the Commission has revised the phrase "every 5 years of the date on which these elements were last completed, or more frequently," to identify and specify those individuals who are required for criminal history and credit history reevaluation every 3 years to maintain his or her unescorted access or unescorted access authorization.

#### **Comment Summary:**

One commenter, supported by many other commenters, stated that 10 CFR 73.56(i)(1)(v)(B) assumed that the industry conducts the processes used to assure that an individual continues to be trustworthy and reliable concurrently when, in fact, it does not. The commenter noted that the criminal history update and credit history re-evaluation (reinvestigation) are normally conducted concurrently. However, proposed 10 CFR 73.56(i)(1)(v)(A) required that these processes be conducted within 5 years of the date on which these elements were last completed.

Since there is no requirement for all these elements to be initially completed at the exact same time, the commenter thought that imposition of a requirement for completion of a five-year update within 30 days of initiating any of the elements would require updating of some of these elements at intervals of less than five years. The commenter said that the frequency of the annual supervisor review was addressed in the proposed 10 CFR 73.56(i)(1)(iv) and did not

need to be included in proposed 10 CFR 73.56(i)(1)(v)(B).

As noted above, the commenter said that the industry recommends the psychological reassessment not be required. Finally, the commenter recommended that there should be no requirement regarding the length of time spent on the required elements. Instead, this section should require that the elements should be completed approximately concurrently. For these reasons, the commenter recommended that 10 CFR 73.56(i)(1)(v)(B) be revised by deleting the mention of the annual supervisor review and the psychological reassessment and by allowing the reviewing official to complete the evaluation of the information obtained from the criminal history update and credit history reevaluation “within 30 calendar days of completing the review of the other of these elements” rather than “within 30 calendar days of initiating any one of these elements”.

**NRC Response:**

The NRC agrees with the received comment. Therefore, the NRC has revised the proposed rule text in the final rule to state that only the criminal history update and the credit history reevaluation shall be completed within 30 calendar days of each other.

**Comment Summary:**

One commenter, supported by many other commenters, thought that the mention in proposed 10 CFR 73.56(k)(1)(ii) that a local criminal history review and evaluation from the State of the individual's permanent residence” was not clear. Based on the proposed rule's Statement of Considerations, the commenter stated that the industry believes that the NRC intends that licensees obtain a criminal history from the police agency serving the individual's permanent residence. The commenter noted, however, that industry experience is that the court system, with its public records, can be a better source of criminal history information than local law enforcement agencies. Also, local law enforcement agencies may not have the staff or budget to provide criminal history information. The commenter recommended that the rule should provide flexibility to pursue the best source of information. The commenter suggested that the Commission revise 10 CFR 73.56(k)(1)(ii) to specify a local criminal history review and evaluation from the court or police agency serving the individual's permanent residence.

**NRC Response:**

The Commission agrees with the commenter's recommendation on the need for flexibility in pursuing to obtain the best information concerning local criminal history information. Thus, the Commission has revised the final rule text to reflect this comment.

**Comment Summary:**

One commenter, supported by many other commenters, stated that the final rule should permit the flexibility to use, in lieu of a local criminal history review and evaluation from the State of the individual's permanent residence, the criminal history check required by the proposed 10 CFR 73.56(d)(7). That section provided that the reviewing official shall evaluate the entire criminal history record of an individual applying for unescorted access authorization and that the criminal history record must be obtained in accordance with the requirements of 10 CFR 73.57.

**NRC Response:**

The Commission agrees with the recommendation to allow licensees to use the criminal history check required by proposed 10 CFR 73.56(d)(7) in lieu of a local criminal history review. The Commission revised the final rule text to allow the use of either criminal history check.

**Comment Summary:**

One commenter, supported by many other commenters, noted that 10 CFR 73.56(m)(1) would require licensees, applicants, and contractors/vendors to disclose employee personal information to NRC representatives. The commenter said that the industry believes that a very limited number of NRC representatives require access to the personal information of employees and recommended that 10 CFR 73.56(m)(1) be revised to provide that industry employee personal information should be accessible only to NRC resident inspectors and NRC inspectors performing inspections for compliance with 10 CFR 73.56. The commenter said that such limited access to this information would be consistent with the requirements for protection of personal information in the Access Authorization Order, dated January 7, 2003.

**NRC Response:**

The Commission disagrees with the comment that industry employee personal information should be accessible only to NRC resident inspectors and NRC inspectors performing inspections. Although the Commission agrees that personal information should only be disclosed to NRC representatives who have a legitimate reason to obtain the information, the NRC extends this legitimate need beyond NRC inspectors, such as the NRC obtaining this personal information for Terrorist Screening Center (TSC) checks.

The Commission's position is that listing specific NRC representatives in the rule could create the potential that requests by NRC representatives who have a legitimate need to obtain this information could be refused, resulting in protracted action to obtain the information that would not be in the best interest of protecting the public health and safety and common defense and security. In addition, the Commission is not aware of any instances in which NRC representatives without a legitimate need have attempted to obtain this kind of personal information. For these reasons, the NRC has retained the wording as proposed.

**Comment Summary:**

One commenter, supported by many other commenters, noted that 10 CFR 73.56(m)(3) required licensees to provide copies of all records pertaining to a denial or unfavorable termination of the individual's unescorted access authorization to designated representatives of the individual but did not describe a means for the licensee to verify that the representative is legitimate. The commenter noted that 10 CFR 73.56(m)(1)(i) required the individual to designate the representative in writing, and that 10 CFR 73.56(m)(3) should be revised to also require the individual to designate the representative in writing. Additionally, the commenter argued that licensees should be required to provide only the information pertinent to the denial or unfavorable termination, not the entire record.

Finally, the commenter noted that 10 CFR 73.56(m)(3) did not permit licensees, applicants, and contractors or vendors to exclude identification of the sources of the information provided, as is permitted currently. The commenter stated that this exclusion is important to ensure that sources who provide such information will continue to do so.

**NRC Response:**

The Commission agrees with the comments and revised paragraph (m)(2) of the final rule to specify that representatives must be authorized by the individual in writing and that information pertaining to the source may be redacted to protect the source. The Commission agrees with the comments because these requirements are necessary to ensure the protection of personal information.

**Comment Summary:**

One commenter, supported by many other commenters, noted that 10 CFR 73.56(n)(1) would require licensees to perform audits of access authorization programs at a frequency of no less than nominally every 24 months. The commenter argued that the NRC discussion of the proposed rule indicated that audits accomplish their objectives at the current 24-month frequency and that there was no discussion regarding any benefit of a shorter frequency or discussion of the complexity of arranging audits at irregular intervals. The commenter argued that, for a program performing well enough to merit auditing at the maximum frequency, a 25 percent margin should be provided. Thus, the commenter recommended that the Commission revise 10 CFR 73.56(n)(1) to state: "Each licensee, applicant and C/V [contractor/vendor] who is subject to this section shall ensure that the full scope of their authorization program is audited as needed, but no less frequently than nominally every 30 months."

**NRC Response:**

The NRC disagrees with the received comment because the definition of "nominal" in 10 CFR Part 26 includes a 25 percent margin. Therefore, the required 24-month nominal auditing frequency would extend the auditing frequency up to 30 months.

**Comment Summary:**

One commenter, supported by many other commenters, said industry believed that the Commission intended in 10 CFR 73.56(n)(4) to provide that auditors be granted access to any documents needed and that auditors should be able to take away copies of documents rather than the original documents. Therefore, the commenter recommended that "copies of any documents and take away any documents" be replaced with "any documents and to take away copies of any documents".

**NRC Response:**

The Commission agrees that the rule should require access to any documents needed and to allow copies rather than original documents to be taken away and has revised the text in the final rule to incorporate this recommendation.

**Comment Summary:**

One commenter, supported by many other commenters, thought that 10 CFR 73.56(n)(5) did not account for the fact that contractor/vendor programs are audited. The commenter argued that it is not reasonable to require the audit team for contractor/vendor audits to include a person who is knowledgeable of and practiced with meeting authorization program performance objectives and requirements. Instead the commenter said the contractor/vendor audit team should include a person who is knowledgeable of and practiced with meeting authorization program performance objectives pertinent to the contractor/vendor's scope of work.

Additionally, the commenter noted that many contractor/vendors do not have people who are independent from both the subject authorization program's management and from personnel who are directly responsible for implementing the authorization program(s) being audited. Therefore, the commenter recommended that 10 CFR 73.56(n)(5) be revised in the following ways: 1) the requirement for inclusion of "a person who is knowledgeable of and practiced with meeting authorization program performance objectives and requirements" should be applied to teams auditing licensee and applicant, but not contractor/vendor, authorization programs; 2) the requirement that individuals performing an audit "shall be independent from both the subject authorization program's management and from personnel who are directly responsible for

implementing the authorization program(s) being audited“ should be applied to teams auditing licensee and applicant, but not contractor/vendor, authorization programs, and 3) at least one member of a team auditing a contractor/vendor program should be “a person who is knowledgeable of and practiced with meeting the authorization program performance objectives and requirements within the scope of work the contractor/vendor performs”.

**NRC Response:**

The Commission disagrees with the comment that requests the final rule to include specific audit requirements for contractors or vendors. This requirement applies to licensees and applicants who are responsible for meeting the requirements of this section. The intent of this requirement is for licensees and applicants to perform audits of their access authorization program to include those program elements that are provided by contractors and vendors.

**Comment Summary:**

One commenter, supported by many other commenters, argued that the 10 CFR 73.56(n)(6) requirement for licensee distribution of audit reports should be consistent with 10 CFR 50 Appendix B, Section XVIII., “Audits.” The commenter claimed that doing otherwise would create an impossible situation because the Audit Program is configured to conform to Appendix B requirements. To accomplish this consistency, the commenter recommended that 10 CFR 73.56(n)(6) be revised to provide that audit results must be reported to “management having responsibility in the area audited” rather than to “senior corporate and site management”.

**NRC Response:**

The Commission agrees with the commenters that paragraph (n)(6) should be consistent with 10 CFR 50, Appendix B. Additionally, the Commission finds that audit reports should be provided to a management at a high enough level to ensure proper disposition and oversight of issues identified during the conduct of audits. Therefore, the Commission has revised the final rule paragraph (n)(6) to require that audit results be provided to senior management having responsibility in the area audited and to management responsible for the access authorization program to ensure proper disposition and oversight of issues identified during the conduct of audits.

**Comment Summary:**

One commenter, supported by many other commenters, noted that 10 CFR 73.56(a)(6) provided that only licensees and applicants, but not contractor/vendors, can grant or permit an individual to maintain unescorted access to nuclear power plant protected areas. Therefore, only licensees and applicants would have records pertaining to denial or unfavorable termination of unescorted access authorization and related management actions. For this reason, the commenter recommended that the Commission remove the reference to contractor/vendors in 10 CFR 73.56(o)(2), making its record retention requirements applicable to licensees and applicants but not to contractor/vendors.

The commenter also noted that 10 CFR 73.56(h)(10) provided that there is no time limit on the prohibition for an individual, who is identified as having an access-denied status in the information-sharing mechanism, from gaining access to the protected area of a nuclear power plant. Therefore, the commenter recommended that 10 CFR 73.56(o)(2) provide that the records pertaining to denial or unfavorable termination of unescorted access authorization and related management actions must be maintained as long as the licensee or applicant is an NRC licensee or applicant.

**NRC Response:**

The Commission agrees with the commenters regarding maintaining records pertaining to denial or unfavorable termination of unescorted access or unescorted access authorization and related management actions as long as the licensee or applicant is an NRC licensee or applicant. Therefore, the Commission revised the final rule text to reflect this comment.

Additionally, although the Commission agrees that only licensees and applicants can grant, certify, permit an individual to maintain, withdraw, deny, or terminate unescorted access or unescorted access authorization status, the Commission disagrees with the assertion that contractors or vendors do not have records that are pertinent to granting, denying, or terminating unescorted access authorization. In fact, contractors or vendors often develop information that is used in access authorization determinations including maintaining individuals' access authorization. For example, a contractor or vendor may provide behavioral observation training and maintain the records.

Therefore, the Commission added the last two sentences to the final rule text to allow contractors or vendors to maintain those records that they collected for applicants and/or licensees as long as they meet the requirements set forth in 10 CFR 73.56. Also, in consideration of the commenters' recommendations, the Commission has revised the proposed rule to require that contractors and vendors provide to licensees and applicants all records that have been collected on behalf of the respective licensee or applicant, upon termination of any contract between the licensee or applicant and the contractor approved program.

**Comment Summary:**

One commenter, supported by many other commenters, noted that 10 CFR 73.56(o)(6) indicated that the information-sharing mechanism is established and administered by licensees, applicants, and contractor/vendors, but the information-sharing mechanism currently exists and was established by licensees only. The commenter argued that the industry believes that only those who can grant or maintain access, i.e., licensees and applicants, should administer the information-sharing mechanism. The commenter noted that the industry group that oversees the information-sharing mechanism does include three contractor/vendor representatives and industry intends to maintain this representation indefinitely.

Additionally, the commenter recommended that 10 CFR 73.56(o)(6) be revised to state that "all users" of the information sharing mechanism, rather than "licensees, applicants, and contractor/vendors," have responsibility for ensuring that only correct information is put into the mechanism. Also, the commenter noted that the information-sharing mechanism does not contain records; it contains data representative of the records. Further, the commenter noted that the Access Program is typically described in the Access Program Procedure rather than the Physical Security Plan.

Lastly, the commenter stated that 10 CFR 73.56(o)(6) indicated that records in the information-sharing mechanism must be available for NRC review. The commenter said that access to the information-sharing mechanism is available at licensee power reactor sites or at the central location for the information-sharing mechanism. The commenter argued that licensee power reactor sites are available to NRC inspectors continually, however, it is not practical to maintain continuous access at the information-sharing mechanism central location. Thus, the commenter recommended that the Commission revise 10 CFR 73.56(o)(6) in the final rule to state that data maintained in the database must be available for NRC review with reasonable notice."

**NRC Response:**

The Commission agrees that the information-sharing mechanism does not contain records. It contains data representative of the records. The Commission revised the final rule text to correct this error. Additionally, the NRC agrees with commenters regarding who can access information-sharing mechanism. However, the Commission did not use the term “user” recommended by the commenter. Instead, the NRC revised the proposed rule to state “licensee, applicant, or the contractor or vendor who have been authorized to add or manipulate data in an information sharing mechanism” for clarity.

Finally, the Commission agrees with the recommended change regarding data maintained in the database available for NRC review. However, the Commission did not use the term “with reasonable notice.” Instead, the Commission used term “as soon as reasonably possible.” The information sharing mechanism is a licensee administered vehicle for the express purpose of managing information that allows licensees, applicants to take credit for the access authorization program actions, which comply with the requirements set forth in this section, taken by other licensee, applicants or contractor or vendors. Therefore, the NRC must be able to access the information sharing mechanism as soon as reasonably possible, for the purpose of conducting inspections or investigations, performing audits or generally ensuring that regulatory requirements are being met.



## 10 CFR 73.58 Safety/Security Interface Requirements for Nuclear Power Reactors Responses to Public Comments

### **Comment Summary:**

Commenters indicated that the proposed rule language adds several programmatic requirements for security that are currently managed through other site programs such as configuration control programs, risk assessment programs, the technical specifications, and work management processes. The commenters stated that imposing the assessment and management of physical modifications, system reconfiguration, maintenance activities, emergent activities, and other departmental responsibilities onto security would significantly impact and detract from security's primary mission of securing and protecting the plant. Thus, the commenters stated that the NRC should revise the proposed rule to take credit for all the existing management programs that are in place and only impose changes related to the security plan and implementing procedures in a security regulation.

### **NRC Response:**

The NRC agrees in part. It is not the intent of this new requirement to impose new broad programmatic requirements on licensees. If current programs and procedures are in place to enable the safety/security interface to be assessed and managed, then those procedures and programs should be used.

The NRC recognizes that increased complexity would only detract from the objectives of this new requirement (to ensure that neither safety nor security is compromised due to the other's activities). The NRC wants licensees to rely upon, and take credit for, currently existing processes to the maximum extent practical. If current work management processes and configuration control programs are adequately controlling facility activities to preclude adverse interactions between safety and security, then these processes should be utilized.

However, it may be necessary for these processes to be revised to account for (if they do not currently) the potential for adverse safety and security interactions. In other cases, the current processes already account for these adverse interactions. Changes to these processes may be made to simply raise the awareness of potential interactions, particularly for areas of the facility where traditionally such interactions would not occur (from a power operations/safety standpoint, there exists a potential to adversely impact security (e.g., in the owner controlled area)). In fact, changes to currently existing processes may be the most efficient means to preclude adverse interactions for normal, day-to-day activities.

The NRC recognizes that various plant programs address the safety/security interface issue to some extent, such as, design change control, procedure change control, and maintenance order review processes. It is the NRC's view, that given the large effort that has been focused onto the processes that control planned changes to the facility (i.e., 10 CFR 50.59 requirements and the supporting guidance) in recent years, that the 10 CFR 73.58 requirements will primarily impact the security-side of the facility (i.e., assessing facility activities to determine whether some aspect of facility security is impacted).

In this regard, the NRC believes that it is important that security expertise be involved in the assessment and management of facility changes since it is not obvious in some cases where activities that may not be important for safety can impact facility security. But the NRC does not envision a large, cumbersome (and impractical) program to assess all ongoing activities. The commenter suggests that the NRC should revise the proposed rule to take credit for existing

programs. The NRC does not believe this type of modification (to rule language) is necessary and that this level of detail, which involves the means by which licensees might comply with the rule requirements, can be best addressed in the guidance that NRC will issue to support 10 CFR 73.58. In summary, the NRC does not intend to impose new broad programmatic requirements in this section and, instead, expects that licensees would make maximal use of existing programs.

**Comment Summary:**

The commenter stated that this section provides general guidance that, if interpreted broadly, could require an explicit review for any change (e.g., editorial changes to procedures may require an explicit assessment). The commenter suggested that NRC consider instituting a screening process.

**NRC Response:**

The NRC agrees with the commenter that implementing 10 CFR 73.58 in such a fashion would be unduly burdensome, and counter-productive. It is the intent of this requirement that changes to the facility that can adversely impact safety or security be assessed and managed. The NRC recognizes that many changes can not have such an impact, and these changes can be readily screened out. Also, the NRC expects that many other changes would be controlled through work control type processes (where adverse interactions are precluded) and, in such situations, the process itself is managing the safety and security interface. The NRC believes that this type of issue is best dealt with in the supporting guidance to 73.58, and did not revise the final rule language.

**Comment Summary:**

The commenter stated that the SOCs cite “variables in the current threat environment” as one justification for the new requirement. The commenter asked: “Does that mean a threat greater than the DBT?”

**NRC Response:**

The safety security requirements are being imposed on licensees as cost-justified safety enhancements per the criteria in 10 CFR 50.109. It is the Commission’s view that 10 CFR 73.58 will enhance the management and assessment process at facilities and preclude/reduce adverse interactions, and that the costs are justified in view of these enhancements per 10 CFR 50.109(a)(3).

The statement citing variables in the current threat environment is misleading, and can be interpreted to mean that 10 CFR 73.58 is required to ensure adequate protection of public health and safety to defend against the revised post September 11, 2001 design basis threat, which is not the case. The final rule language has been revised to remove the statement in question, as well as other similar verbiage that can be misinterpreted by stakeholders to cause them to conclude that this new requirement is necessary for adequate protection of public health and safety.

**Comment Summary:**

The commenter stated that the SOCs reference plant events that demonstrate that changes to the facility, its security plan, or implementation of the plan can have adverse effects. The commenter stated that it would be beneficial if the NRC shared these events with industry so they can be captured in lessons learned.

**NRC Response:**

The NRC agrees. In fact, the NRC issued Information Notice 2005-33 "Managing the Safety/Security Interface" where this information was shared with industry. The SOCs supporting 10 CFR 73.58 have been revised to reference this information notice.

**Comment Summary:**

The commenter asked, "If a licensee is implementing a measure to comply with a regulation, does this provision apply?" The commenter stated that the rulemaking process should require the Commission to conduct a safety/security interface assessment before any rule is promulgated.

**NRC Response:**

Measures used to implement Commission requirements are subject to safety/security interface. As a general rule, licensees are required to comply with the regulations, and through such compliance ensure that the activities at the facility provide reasonable assurance of public health and safety and common defense and security. Prior to issuance of 10 CFR 73.58, licensees were required to ensure that facility activities did not adversely impact safety or security (otherwise the activity would have caused the license to fail to comply with the governing requirements in the respective area). Section 73.58 makes explicit what was already an implicit requirement, and thus is considered by the NRC to be a more coherent regulation. The SOCs supporting 10 CFR 73.58 were revised to reflect this fact.

Regarding the other aspect of this comment, the NRC is not a licensee nor applicant, and as such, is not subject to the requirements of 10 CFR 73.58. However, the NRC is sensitive to the potential adverse impacts of new regulations, and when such impacts are known, the NRC attempts to factor them into its regulatory analysis supporting the new requirements.

**Comment Summary:**

The commenter stated that this new requirement is lacking in a performance standard.

**NRC Response:**

The NRC disagrees. The performance-standard for 10 CFR 73.58 is clearly stated in paragraph (b). The rule states that, "Where potential adverse interactions are identified, the licensee shall communicate them to appropriate licensee personnel and take compensatory and/or mitigative actions to maintain safety and security under applicable Commission regulations, requirements, and license conditions."

The NRC believes that this is a reasonably clear performance standard. The NRC did not elect to be more prescriptive with the standard in the rule since such prescription is generally counter to good regulation, and additionally such prescription may become too limiting to address the wide variety of situations that might occur. Instead, the NRC elected to support this requirement with guidance that would assist licensees in determining how best to comply with the standard. No changes to the final rule or supporting SOCs were made as a result of this comment.

**Comment Summary:**

Another commenter stated that this provision satisfies the Union of Concerned Scientists' (UCS's) concerns that prompted UCS to petition the NRC. The commenter noted that during the NRC public meeting on March 9, 2007, an industry working group representative asserted that this requirement was too onerous, too burdensome, and too complex for his company to implement. The commenter argued that a competent licensee should have no difficulty meeting

this requirement with little burden.

**NRC Response:**

The NRC agrees. The NRC agrees that the requirements of this section address a portion of Petition for Rulemaking (PRM) 50-80. The NRC also believes that the concerns raised by industry are a result of an interpretation of 10 CFR 73.58 that assumes that it is imposing new, broad programmatic requirements onto the licensee. This is not the intent as has been discussed in previous comment responses. No revisions were made to the final rule or SOCs as a result of this comment, although the SOCs were revised to reflect the fact that NRC does not intend to impose new broad programmatic requirements in this section.

**Comment Summary:**

A commenter, following a lengthy discussion of proposed 10 CFR 73.58, recommended that the NRC consider pursuing enhancements to the existing processes or at least ensure that the final rule acknowledges the acceptability of the regulations already in place.

**NRC Response:**

The NRC agrees. The intent of this requirement is to ensure the each licensee evaluates and utilizes the information currently available from existing programs and ensures the effective interface between these existing programs in a manner that ensures the public health and safety. As mentioned in response to two previous comments, the SOCs were revised to reflect the fact that the NRC does not intend to impose broad, new programmatic requirements by this section, and that the NRC expects licensees to make maximal use of current programs. It is probable that this language would result in enhancements to current procedures and processes to make more explicit reference to 10 CFR 73.58.

## **Part 73 Appendix B Responses to Public Comments**

### **Comment Summary:**

One commenter stated that the title should indicate that the training is for security personnel. Thus, the commenter recommended that the Commission change the title in the final rule to “Nuclear Power Reactor Security Personnel Training and Qualification Plan.”

### **NRC Response:**

The Commission agrees in part. The Commission agrees that this title should be revised to clarify applicability. However, the Commission disagrees with the suggested change. This title is revised to clearly identify that this training and qualification (T&Q) plan addresses T&Q for security program duties being performed and is not limited by position or organization titles within the security organization. The T&Q requirements of this Appendix also apply to non-security organization personnel performing security duties.

### **Comment Summary:**

Another commenter supported the detailed NEI comments for Appendix B and stated that it has incorporated much of the detailed guidance of NEI 03-09 as regulatory requirements. The commenter noted that this detail is more appropriate as guidance versus requirements, and inclusion in a rule undermines standardization by reintroducing site specific detail that is better contained in implementing procedures alone.

### **NRC Response:**

The Commission disagrees. The licensee may implement Commission requirements through the T&Q plan and implementing procedures. The requirements of this Appendix have been updated to provide the regulatory framework for the plans and procedures referred to by this comment. One of the primary purposes of this rulemaking is to update the regulatory framework to more accurately represent the requirements for NRC-licensed facilities. Therefore, the Commission disagrees that the updated rule text in this Appendix is better contained in implementing procedures, but rather believes that these requirements are implemented through the implementing procedures referred to by this comment.

### **Comment Summary:**

One commenter stated that proposed Part 73, Appendix B, A.1 and associated SOCs imply that “any individual who is assigned to perform a security function” is now expected to “meet minimum training and qualification requirements.” The commenter stated that this could be very broadly interpreted to apply to many and varied licensee positions, including access authorization, FFD, computer technicians, contractors, plant operators, etc. The commenter said that additional definition or clarification may help minimize regulatory interpretation. The commenter stated that this consideration is more expansive, either by mistake or intent, than A.3, which clearly limits some requirements to the “security organization.” The commenter recommended that the Commission revise this provision in the final rule by replacing “all individuals” with “all security personnel.”

### **NRC Response:**

The Commission agrees in part. The Commission explicitly intends to require that “any individual who is assigned to perform a security function” is now expected to “meet minimum training and qualification requirements” for those assigned duties whether the individual is a

member of the security organization or other facility staff. Any person assigned to perform a physical protection and/or contingency response duty must be trained & qualified to ensure they can physically and mentally perform the assigned duty. In specific areas of this appendix where the applicability is limited to security personnel, the requirement clearly identifies this limited applicability. The Commission disagrees that Paragraph A.3 is limited to only security organization personnel. Therefore, the Commission disagrees with the suggested rule text change and has retained the phrase “all individuals” as this is the intent of this generic requirement.

**Comment Summary:**

The same commenter noted that proposed 10 CFR 73, Appendix B, A.1 SOCs state that implementation of the Commission-approved security plans, licensee response strategy, and implementing procedures would provide a detailed list of programmatic areas for which the licensee must provide effective T&Q to satisfy the performance objective for protection against radiological sabotage. The commenter stated that “detailed list of programmatic areas” is undefined and asked if this is the listing of Critical Tasks or the Task List proposed by NEI. The commenter recommended that the Commission clarify the proposed Part 73 Appendix B, A.1 SOC to state:

“The programmatic areas are listed in the Commission approved Training and Qualification plan for each licensee. Specific training and qualification requirements to support these areas are derived by the licensee during the use of the graded Systematic Approach to Training process. Training elements and Qualification criteria are specific to each licensee.”

**NRC Response:**

The Commission disagrees with the suggested SOC text change because the Commission does not intend to require a graded systematic approach to training for each licensee. The Commission agrees that the detailed list of programmatic areas is undefined because that list is unique and different at each site and can only be addressed generically in this rule. Therefore, each site is responsible to document this list as part of the T&Q plan whether they choose a systematic approach to training or another acceptable method for their training process.

**Comment Summary:**

One commenter stated that the proposed Part 73, Appendix B, A.2 and SOCs do not, but should, recognize the Systematic Approach to Training process. The commenter recommended that the Commission revise proposed Part 73, Appendix B, A.2 in the final rule by adding the following sentence to the end of the provision:

“The minimum training and qualification areas are listed in the Commission-approved Training and Qualification plan for each licensee. Training and qualification requirements to support these areas are derived by the licensee during the use of the graded Systematic Approach to Training process. Training elements and qualification criteria are specific to each Licensee.”

**NRC Response:**

The Commission disagrees with the suggested rule text change because the Commission does not intend to require a systematic approach to training for each licensee. The Commission agrees that the detailed list of programmatic areas is undefined because that list is unique and different at each site and can only be addressed generically in this rule. Therefore, each site is

responsible to document this list as part of the T&Q plan whether they choose a systematic approach to training or another acceptable method for their training process.

**Comment Summary:**

One commenter stated that the requirement to “simulate” was not previously in Part 73. The commenter stated that this term carries a different meaning than “consider.”

**NRC Response:**

The Commission agrees that the stated requirement to simulate was not previously contained in Part 73. The intent is to “simulate” and not simply consider. The Commission’s expectation is that personnel shall be trained in a manner which simulates the site specific conditions under which the assigned duties and responsibilities are required to be performed.

**Comment Summary:**

Another commenter stated that proposed 10 CFR 73, Appendix B, A.7 does not recognize the changes proposed in Security Frequently Asked Questions (SFAQ) 05-17, “Scheduling of Annual Training.” The commenter noted that this SFAQ describes a proposed change to NEI 03-09, “Security Officer Training Program,” Section 8.2, “Training Periodicity,” as follows: “The licensee may schedule training at an earlier date which may then be used as the basis for scheduling the next training requirement. This ‘short-cycled’ training will always result in more training than the minimum required by requirements. This new scheduled date is the basis for the next scheduled date.” Thus, the commenter recommended that the Commission revise Part 73, Appendix B, A.7 in the final rule by adding the following sentence to the end of the provision:

“The licensee may schedule training at an earlier date which may then be used as the basis for scheduling the next training requirement. This ‘short-cycled’ training will always result in more training than the minimum required by the Commission-approved Training and Qualification plan. This new scheduled date shall be the basis for the next scheduled date.”

**NRC Response:**

The Commission disagrees with adding SFAQ 05-17 “scheduling of Annual Training” to the rule text. SFAQ 05-17 is a draft document and not a final NRC position. The draft SFAQ will be incorporated into the regulatory guide for training and qualification and will provide guidance on this issue. The intent of this requirement is to provide the licensee with the necessary flexibility to resolve scheduling issues due to unexpected circumstances.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73, Appendix B, B.1.b and associated SOCs add the phrase “by a qualified training instructor.” The commenter stated that this blanket addition located throughout the proposed changes to Appendix B will create a huge administrative burden and add additional cost as processes overseen by other organizations (such as Medical) will now require administration by a qualified training instructor.

The commenter noted that there is no definition of “qualified training instructor,” which will lead to confusion regarding compliance. The commenter noted that the current basis for the change does not identify a performance or regulatory gap, and the proposed change creates a regulatory gap where none existed before. Thus, the commenter recommended that the Commission restore the proposed wording to that in the existing Appendix B to state: “The qualifications of each individual must be documented and attested by a licensee security

supervisor.”

**NRC Response:**

The Commission disagrees and has retained the proposed language as written. The Commission has determined that currently, many licensees employ training instructors to manage and direct the oversight of their security training program. This oversight includes ensuring that security personnel meet the physical requirements (such as medical) prior to assuming any security duty. The training instructor is typically responsible for the final documentation of each critical task qualification performed by individuals who are assigned duties and responsibilities identified in the Commission-approved security plans.

The requirement for a “qualified” training instructor was added to ensure that the training program is managed and designed to support the site’s response strategies and regulatory requirements by an individual who is qualified within the licensee’s program and processes to develop, implement and provide oversight of the security training program. The security supervisor shall then verify and attest to the proper documentation and completion of each individual’s training record as prepared by the qualified training instructor.

**Comment Summary:**

Another commenter recommended that, because on-the-job training (OJT) can be signed off by personnel qualified for that task, the Commission should replace “qualified training instructor” with “qualified personnel.” The commenter recommended that the Commission revise 10 CFR 73, Appendix B, B.1.b in the final rule to state: “The qualification of each individual to perform assigned duties and responsibilities must be documented *and the security supervisor must attest to the fact that the required training was administered by qualified personnel.*”

**NRC Response:**

The Commission disagrees and has retained the proposed language as written. Although OJT may be conducted by field training officers (FTOs) and/or subject matter experts (SMEs) who may initially verify (sign-off) that a trainee has successfully completed the OJT assignments, the OJT program remains under the control and direction of a qualified security training instructor and the final documentation for the completion of the OJT program must be conducted by the qualified training instructor to ensure all program goals and regulatory requirements are met by the licensee.

**Comment Summary:**

One commenter recommended that the Commission insert the phrase “of assigned security job duties and responsibilities” at the end 10 CFR 73, Appendix B, B.2.a.(1) in the final rule. The commenter stated that this would allow for use in limited duty positions.

**NRC Response:**

The Commission agrees. This paragraph is revised to provide the ability to utilize personnel in other capacities within the physical protection program that will not be adversely affected by the current physical condition and qualification of the individual.

**Comment Summary:**

One commenter stated that the requirements in 10 CFR 73, Appendix B, B.2.a.(1) adequately address the physical requirements for unarmed security personnel. Thus, the commenter recommended that the Commission delete “and unarmed members” from the provision in the final rule.



**NRC Response:**

The Commission disagrees. Paragraph B.2.a.(1) is the requirement for individuals to not have any physical conditions that would adversely affect their performance, and B.2.a.(2) is the requirement for a physical exam. The physical exam is applicable to any individual assigned to perform physical protection and/or contingency response duties within the physical protection program.

**Comment Summary:**

One commenter stated that proposed Part 73 Appendix B, B.2.a.(4) is more stringent than existing requirements. The commenter stated that all personnel that have roles and responsibilities in the day-to-day security operations of the facility but little or no responsibility in actual response to contingency events should not be required to meet an increased physical standard. Thus, the commenter recommended that the Commission revise this provision in the final rule by deleting "and unarmed."

**NRC Response:**

The Commission disagrees. The language states, in part, "as required to effectively perform their assigned duties". This will allow the licensee to evaluate each assigned duty and the minimum physical requirement associated with each assigned duty to ensure that individuals assigned to perform physical protection and/or contingency response duties are physically qualified commensurate with the duties assigned.

**Comment Summary:**

Another commenter stated that the requirements in 10 CFR 73, Appendix B, B.2.a.(1) adequately address the physical requirements for unarmed security personnel. Also, the commenter noted that there appears to be a error in the numbering sequence that follows 10 CFR 73, Appendix B, B.2.a.(4). Thus, the commenter recommended that the NRC reword this provision to state: "...the licensee protective strategy, and implementing procedures, meets the minimum physical requirements *delineated in B.2.b, B.2.c, and B.2.d* as required to effectively perform their assigned duties."

**NRC Response:**

The Commission agrees in part. The numbering sequence is revised. The Commission disagrees with the rule text change and has retained the proposed language as written to ensure the text provides the clarity needed when discussing two different requirements that are being addressed by paragraphs B.2.a.(1) and B.2.a.(4).

**Comment Summary:**

The commenter stated that 10 CFR 73, Appendix B, B.2.b seems unnecessary; the existing requirements ensure the officer has an extra pair of corrective lenses. The commenter argued that the rule language does not need to be so prescriptive to tell the officer when to wear the extra pair of lenses.

**NRC Response:**

The Commission disagrees. The medical requirements listed in the following paragraphs were taken from pre-existing rule language. No changes were made to these specific requirements.

**Comment Summary:**

The commenter stated that 10 CFR 73, Appendix B, B.2.f applies to all security personnel.

**NRC Response:**

The Commission disagrees. This paragraph of the rule applies to any individual that performs physical protection and/or contingency response duties associated with the effective implementation of the Commission-approved security plans, licensee protective strategy, and implementing procedures.

**Comment Summary:**

Referencing 10 CFR 73, Appendix B, B.3.b, one commenter recommended that the Commission modify this provision by inserting the phrase “or other person professionally trained to identify emotion instability” after “psychiatrist, physician trained in part to identify emotional instability.”

**NRC Response:**

The Commission disagrees. This would reduce the effectiveness of having a licensed professional conduct the examination.

**Comment Summary:**

One commenter stated that 10 CFR 73, Appendix B, B.4.a is redundant to B.2.a.(3), which already requires a physical exam by a licensed physician. Thus, the commenter recommended that the Commission delete B.4.a (the first B.4.a).

**NRC Response:**

The Commission agrees in part, however, no change to the rule text has been made. The physical examination discussed in paragraph B.2.a.(3) of this appendix may be used to fulfill this requirement. The Commission’s expectation is that an individual’s current health status is verified prior to engaging in the physical fitness test and that there is no existing medical condition which would be detrimental to the individual’s health when placed under the physical stress induced by the physical fitness test. Scheduling the physical fitness test for each armed individual as soon as possible after the date of the physical examination that is required by 10 CFR 73, Appendix B, B.2.a.(3) provides the verification of the individual’s current health status, minimizing the possibility of the individual incurring a medical condition from the time of examination to the time that the physical fitness test is administered.

**Comment Summary:**

The same commenter stated that the Commission must correct the numbering in 10 CFR 73, Appendix B, B.4.a(1). Thus, the commenter recommended that the NRC replace “from the licensed physician” with “from the exam required by B.2.a.(3).”

**NRC Response:**

The Commission agrees in part and the numbering sequence error is revised. The second part of the comment is explained in the response above.

**Comment Summary:**

The commenter stated that 10 CFR 73, Appendix B, B.4.d.(3) should be renumbered to B.4.b.(3).

**NRC Response:**

The Commission agrees. The numbering sequence is revised.

**Comment Summary:**

One commenter stated that proposed Part 73 Appendix B, B.4.b.(4) does not allow the use of a trained medical professional or licensed physician to attest to the physical fitness qualification of armed officers who may actually be performing the physical fitness test in a controlled environment. Thus, the commenter recommended that the Commission revise this provision in the final rule to state: “The physical fitness qualification of each armed member of the security organization must be documented by a *licensed medical person, licensed physician, or* qualified training instructor, and attested to by a *licensed medical person, licensed physician, or* security supervisor.”

**NRC Response:**

The Commission disagrees. This would place an unnecessary burden on the medical staff and is not the intent of the rule. The licensed medical professional is required to conduct the medical examination prior to the physical fitness test being administered. The purpose of the examination is to verify that the individual's current health status is sufficient to engage in the physical exertion of the test without being detrimental to the individual's health. The licensed medical professional provides a certification of the individual's health as described in paragraph 10 CFR 73, Appendix B, B.4.a.(1) prior to the test, but is not required to administer the physical fitness test nor are they required to document or attest to the successful completion of the test.

The Commission's expectation is that a qualified training instructor documents the successful completion of the physical fitness test in the individual's training record and that the documentation of the completed requirement be attested to by a security supervisor. The physical fitness test is a performance based test that is designed to demonstrate an individual's physical ability to perform assigned security duties in both normal and emergency operations. The test consists of performing physical activities associated with contingency response duties that replicate site specific conditions which would be encountered in the contingency response environment.

**Comment Summary:**

Another commenter stated that the Commission should revise 10 CFR 73, Appendix B, B.4.a(1) by replacing “by a qualified training instructor and attested to by a security supervisor” with “and the security supervisor must attest to the fact that physical fitness qualification was administered by qualified personnel.”

**NRC Response:**

The Commission disagrees and has retained the proposed language as written. The Commission has determined that currently, many licensees employ training instructors to manage and direct the oversight of their security training program. The training instructor is typically responsible for the final documentation of each critical task qualification performed by individuals who are assigned duties and responsibilities identified in the Commission-approved security plans.

The requirement for a “qualified” training instructor was added to ensure that the training program is managed and designed to support the site's response strategies and regulatory requirements by an individual who is qualified within the licensee's program and processes to develop, implement and provide oversight of the security training program. The security supervisor shall then verify and attest to the proper documentation and completion of each individual's training record as prepared by the qualified training instructor.

**Comment Summary:**

One commenter recommended that the Commission revise proposed 10 CFR 73, Appendix B, B.5.a in the final rule by inserting “and alarm station operators” after “armed members of the security organization.”

**NRC Response:**

The Commission disagrees. The physical examination described in 10 CFR 73, Appendix B, B.2.a.(2) includes alarm station operators whether the alarm station operators are armed or unarmed. This paragraph establishes the requirement for the annual physical requalification (physical examination and physical fitness test as applicable) of any individual assigned to perform physical protection and/or contingency response duties within the physical protection program.

**Comment Summary:**

One commenter expressed the same concerns for the proposed 10 CFR 73, Appendix B, B.5.b as in B.4.b.(4) above. Thus, the commenter recommended that the Commission revise 10 CFR 73, Appendix B, B.5.b in the final rule to state: “The physical requalification of each armed and unarmed member of the security organization must be documented by a *licensed medical person, licensed physician, or* qualified training instructor and attested to by a *licensed medical person, licensed physician, or* security supervisor.”

**NRC Response:**

The Commission disagrees. This would place an unnecessary burden on the medical staff and is not the intent of the rule. Once the written medical certification is received by the licensee, it is the Commission’s expectation that the qualified training instructor will document the individual’s physical qualification in the individual’s training record. The documentation of the physical requalification verifies that the individual has met the basic physical requirements to perform physical protection duties and associated training and qualification activities in accordance with this appendix.

**Comment Summary:**

Another commenter recommended that the Commission revise the proposed 10 CFR 73, Appendix B, B.5.b in the final rule to state: “The physical requalification of each member of the security organization *and alarm station operators* must be documented *and the security supervisor must attest to the fact that physical requalification was administered by qualified personnel.*”

**NRC Response:**

The Commission disagrees and has retained the proposed language as written. The Commission has determined that currently, many licensees employ training instructors to manage and direct the oversight of their security training program. The training instructor is typically responsible for the final documentation of each critical task qualification performed by individuals who are assigned duties and responsibilities identified in the Commission-approved security plans.

The requirement for a “qualified” training instructor was added to ensure that the training program is managed and designed to support the site’s response strategies and regulatory requirements by an individual who is qualified within the licensee’s program and processes to develop, implement and provide oversight of the security training program. The security

supervisor shall then verify and attest to the proper documentation and completion of each individual's training record as prepared by the qualified training instructor.

**Comment Summary:**

One commenter stated that "assigned to perform *any* security-related duty or responsibility," is too broad and should be specific to security-related duties or responsibilities, as identified in the security plans. Thus, the commenter recommended that the NRC revise 10 CFR 73, Appendix B, C.1. by inserting the phrase "as identified in the Commission approved security plans, licensee protective strategy, or implementing procedures" after "duty or responsibility."

**NRC Response:**

The Commission disagrees. The term "any" is used in conjunction with "security-related duty or responsibility" The Commission believes that this is sufficiently clear and is necessary to establish the appropriate performance-criteria.

**Comment Summary:**

One commenter recommended that the Commission delete 10 CFR 73, Appendix B, C.1.b.(3) from the final rule because it is redundant to C.1.b.(1). If the Commission does not delete this provision, the commenter recommended that the NRC revise C.1.b.(3) to state: "be trained and qualified in the use of all required equipment or devices required to effectively perform all assigned duties and responsibilities."

**NRC Response:**

The Commission disagrees. 10 CFR 73, Appendix B, C.1.b.(3)(1) focuses on the training of assigned duties and responsibilities and C.1.b.(3) is to ensure that individuals performing physical protection and/or contingency response duties are not only trained on their assigned duties and responsibilities, but also trained and qualified on the use of all equipment or devices required to effectively perform all assigned duties and responsibilities.

**Comment Summary:**

One commenter stated that 10 CFR 73, Appendix B, C.2 is new requirement that should be evaluated in the Regulatory Analysis.

**NRC Response:**

The Commission disagrees. On-the-job training was identified as a new requirement and taken into consideration and discussed in the Regulatory Analysis.

**Comment Summary:**

The commenter stated 10 CFR 73, Appendix B, C.2.b and C.2.c are not necessary because C.1.a and C.2.a cover these requirements. The commenter also noted that there is a requirement for documentation for OJT in C.2.b that must be moved to C.2.a. Thus, the commenter recommended that the Commission add the following sentence to C.2.a: "On-the-job training must be documented and the security supervisor must attest to the fact that the OJT was administered by qualified personnel."

**NRC Response:**

The Commission disagrees. The Commission considers the requirement in paragraph 10 CFR 73, Appendix B, C.2.a as minimum criteria that requires licensee's to establish and implement an OJT program to ensure that individuals receive a basic level of "hands on" experience in nuclear security functions before being considered qualified and assigned unsupervised security

duties and responsibilities.

For the requirements outlined in 10 CFR 73, Appendix B, C.2.b and C.2.c, it is the Commission's expectation that the licensee will provide a minimum of 40 hours of OJT specific to contingency response for individuals assigned duties and responsibilities to implement the Safeguards Contingency Plan (armed responders). The OJT provided for contingency response as required by 10 CFR 73, Appendix B, C.2.b and C.2.c is in addition to the OJT required by C.2.a.

The Commission disagrees with the second part of the comment. Although OJT may be conducted by field training officers (FTOs) and/or subject matter experts (SMEs) who may initially verify (sign-off) that a trainee has successfully completed the OJT assignments, the OJT program remains under the control and direction of a qualified training instructor and the final documentation for the completion of the OJT program must be conducted by the qualified training instructor to ensure all program goals and regulatory requirements are met by the licensee.

**Comment Summary:**

The commenter stated that the Commission should move the elements listed in 10 CFR 73, Appendix B, C.2.c to implementing/regulatory guidance. The commenter stated that the language is too prescriptive for inclusion in a performance-based rule.

**NRC Response:**

The Commission disagrees. The Commission considers the requirements in 10 CFR 73, Appendix B, C.2.c as minimum criteria needed to ensure armed responders can effectively implement the licensee's protective strategy before being considered qualified and assigned unsupervised security duties and responsibilities associated with contingency response.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73, Appendix C, Sections II(l) through (l)(6)(iv) do not belong in either Appendix C or the SCP. The commenter stated that the NRC should specify program requirements related to drills and exercises in 10 CFR 73.55 as PSP and T&Q requirement.

**NRC Response:**

The Commission agrees. The requirements for the performance evaluation program have been relocated to appendix B in entirety as the performance evaluation program and all associated elements are a function of the licensee training and qualification program.

**Comment Summary:**

Another commenter stated that the Performance Evaluation Program is not a contingency response and the Commission should move these training requirements from the SCP.

**NRC Response:**

The Commission agrees. See the response above.

**Comment Summary:**

A commenter noted that the performance evaluation process is a training requirement and is currently described in NEI 03-12, Appendix B, Section 4, Team Training. Also, the commenter stated that the requirements for information provided in the proposed rule are much too detailed

and would be more appropriately placed into regulatory guidance. Thus, the commenter recommended that the NRC eliminate the majority of information and rewriting the proposed rule in a more concise performance-based manner.

**NRC Response:**

The Commission agrees with relocating the requirements of the performance evaluation program, however, disagrees that the elements within these requirements are too detailed. The Commission believes that the performance evaluation program requirements provide the appropriate level of detail to ensure all program goals and regulatory requirements are met by the licensee.

**Comment Summary:**

Another commenter stated that the Commission should move all elements of the performance evaluation program to 10 CFR 73, Appendix B, Section C.3. The commenter noted that it is a training requirement and is currently described in NEI 03-12, Appendix B, Section 4, Team Training.

**NRC Response:**

The Commission agrees. The requirements for the performance evaluation program have been relocated to Appendix B in their entirety as the performance evaluation program and all associated elements are a function of the licensee training and qualification program.

**Comment Summary:**

A commenter stated that 10 CFR 73, Appendix B, C.3.a does not comply with the EAct of 2005 because nowhere in this section does it state whether these exercises will be evaluated by the NRC or even if the results of the drills will be required to be submitted to the NRC.

**NRC Response:**

The Commission does not agree that it is appropriate to place a requirement on the NRC in this rule text. The requirement for the NRC to conduct force-on-force exercises every three years was mandated by Congress and is applicable to the NRC through the EAct of 2005. The requirements stated in this Appendix apply to NRC licensees.

**Comment Summary:**

Another Commenter stated that the requirements in 10 CFR 73, Appendix B, Section VI, C.3 do not address Section 651 of the Energy Policy Act of 2005 (EAct) which requires that "not less often than once every 3 years, the Commission shall conduct security evaluations (to include force-on-force exercises) at each licensed facility that is part of a class of licensed facilities, as the Commission considers to be appropriate, to assess the ability of a private security force of a licensed facility to defend against any applicable design basis threat." Additionally the commenter stated that this paragraph is not consistent with the current regulations, specifically 10 CFR 73.46(b)(9), for Category I fuel cycle facilities which clearly states the requirement for a Commission role in the force-on-force exercise program.

**NRC Response:**

The Commission disagrees. Although the Commission has the discretion to issue regulations that govern its own practices (e.g., Part 2), the Commission is not legally required to reflect a statutory requirement in the form of its own regulations. If the NRC were required to implement an obligation in a particular way in a regulation, then direction would come from Congress in the authorizing statute. Unlike some other provisions of the EAct (see, e.g., Section 170E

requiring the NRC to conduct a rulemaking to revise the Design Basis Threat), the EAct did not require the Commission to implement the requirements of Section 651 by any particular method.

In light of this, the Commission has the discretion to implement its statutory obligations as it sees fit. If the Commission chooses to limit its compliance with a statutory mandate in the form of specific regulation, then it has the discretion to do so.

The commenter references 10 CFR 73.46(b)(9) (regarding force on force exercises for Category I SSNM fuel cycle facilities) as an example of a regulation that imposes an obligation on the NRC to conduct force-on-force evaluations, and argues that the power reactor regulations should take a consistent approach.

10 CFR 73.46(b)(9), however, does not stand for the proposition claimed by the commenter. This provision requires that "during each 12-month period commencing on the anniversary of the date specified in paragraph (i)(2)(ii) of this section, an exercise must be carried out at least every four months for each shift, one third of which are to be force-on-force" and that "during each of the 12-month periods, the NRC shall observe one of the force-on-force exercises." Thus, the regulator imposes an obligation on the licensee to organize and conduct a force-on-force exercise to meet the requirement, and that the licensee must coordinate with the NRC who would "observe" one of those exercises. In contrast, the NRC is responsible for the conduct of force-on-force exercises for power reactor licenses mandated by Section 651 of the EAct.

The Commission notes, however, that it has strictly complied with the requirements of Section 651. Since the enactment of Section 651, which added Section 170D to the Atomic Energy Act of 1954, as amended (AEA), the Commission has conducted over 80 force-on-force inspections at nuclear power plants. In addition, the NRC submitted three annual reports to Congress describing the results of its security inspections, as required by Section 170D.e of the AEA. (See, e.g., the Commission's second annual report to Congress, available at <http://www.nrc.gov/security/2006-report-to-congress.pdf>). The Commission is, therefore, in full compliance with Section 170D, and does not see the need to codify requirements to impose an obligation on itself to meet this obligation.

**Comment Summary:**

Regarding 10 CFR 73, Appendix B, C.3.b, one commenter recommended that the Commission delete the word "intercept" because not all sites include interception in their protective strategy.

**NRC Response:**

The Commission agrees in part. This paragraph is revised to reflect the overall program scope that is the basis for the design and content of implementing procedures for the conduct of tactical response drills and force-on-force exercises. The detailed performance based terminology of "detect, assess, intercept, challenge, delay and neutralize" have been removed from this paragraph and replaced with "demonstrate and assess the effectiveness of the licensee's physical protection program, protective strategy and contingency event response".

This revision is necessary to focus the requirement for procedures and their content on the overall scope of the physical protection program, protective strategy and contingency event response and not restrict this requirement to the more detailed sub-elements that support effectiveness. The periodicity requirement for the conduct of tactical response drills and force-on-force exercises is removed from this paragraph as it is captured in paragraph C.3.l(1) of this appendix.



**Comment Summary:**

One commenter stated that there should be enhanced training of on- and off-site back-up security, and training of both together in realistic scenarios, as well as enhanced and realistic mock-attack drills with requirements to immediately address and fix identified deficiencies.

**NRC Response:**

The Commission agrees in part, however the conduct of enhanced training with additional on and off site entities is beyond the scope of this rulemaking. The NRC's regulatory authority extends only to licensees and applicants and not to external federal, state and local law enforcement entities. Therefore, the NRC can not mandate external agency participation in such training. It is the licensee's responsibility to ensure that these elements are analyzed and included, if necessary, into their training program.

Paragraph C.3.i of this appendix requires findings, deficiencies and failures identified during tactical response drills and force-on-force exercises that adversely affect or decrease the effectiveness of the protective strategy and physical protection program to be entered into the licensee's corrective action program.

**Comment Summary:**

Another commenter endorsed the recommendations made in previous filings by the Committee to Bridge the Gap and the Union of Concerned Scientists. The commenter urged the Commission to upgrade drills and testing protocols to remedy the flaws that are a matter of public record and to take into account the realities noted herein. The commenter said FOF tests must be sufficiently challenging to provide high confidence in the defensive capabilities of the security forces at the nation's 103 nuclear power plants.

The commenter noted that one clear failing of the FOF program has been excessive warning regarding upcoming tests. While some notice is necessary, the commetner said one week should suffice. In addition, the commenter recommended that staff assignments be frozen on the day of notice, which would eliminate the all too common practice of substituting a plant's most fit and accomplished security personnel in place of underachievers. The commenter stated that it is also critical that drills and the FOF program be revamped to eliminate manifest conflicts of interest. The commenter concluded that the program must be redesigned and monitored by an independent entity such as the U.S. military.

**NRC Response:**

The NRC FOF program is designed to challenge the licensees protective strategy and measure the licensees capability to provide effective protection against the design basis threat of radiological sabotage. Unlike other FOF exercises conducted by other governmental agencies (DOD, DOE), the NRC is testing the operational readiness of a private entity to defend against the NRC design basis threat. While doing so, the plant is at full operating capacity and the plant must maintain all NRC mandated safety and security requirements.

In order to maintain safety and security compliances, as well as the capability to conduct safe and effective exercises, the Commission has determined that an eight week notification to the licensee meets our requirements to ensure a safe operating environment and an effective and challenging FOF inspection. NRC Inspectors monitor the possibility of personnel substitutions that may detract from a representative sample of the on duty security force. Although there are no regulations prohibiting licensee substitutions of personnel for a force on force inspection,

allegations of substitutions that significantly alter a representative sample are investigated and changes are made to the duty roster if deemed necessary.

The potential for a conflict of interest is addressed in pre-existing NRC regulation as well as in specific elements of the NRC FOF inspection process and is monitored and reviewed to ensure that the potential for a conflict of interest is minimized.

**Comment Summary:**

One commenter stated that in the context established by 10 CFR 73, Appendix B, C.3.d the rule language should focus on the scope of drills and exercises, not the individual participants. Therefore, the commenter stated that the Commission should revise the provision in the final rule to state: "Drills and exercises must be designed to challenge *the site protective strategy against elements of the design basis threat and ensure participants demonstrate requisite knowledge, skills, and abilities.*"

**NRC Response:**

The Commission agrees with the comment. This paragraph was revised to emphasize the scope and overall objective of conducting tactical response drills and force-on-force exercises as well as the importance of individual performance by the members of the security response organization.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.e requirements are better suited for guidance that currently exists in NEI 03-09.

**NRC Response:**

The Commission disagrees. The Commission believes that this requirement reflects a performance based criteria that provides a measurable outcome and is appropriate for inclusion in the rule.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.f requirements are better suited for guidance that currently exists in NEI 03-09. Also, the commenter stated that the term "as needed" is too ambiguous and should be clarified.

**NRC Response:**

The Commission agrees in part. The Commission believes that this requirement reflects a performance based criteria and is appropriate for inclusion in the rule. This paragraph is revised to clarify that the conduct of drills for training purposes can only be determined by the licensee to address site-specific, individual, or programmatic elements where the licensee has identified a need for improvement or verification.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.g requirements are better suited for guidance that currently exists in NEI 03-09. Also, the commenter stated that the proposed requirements are more appropriate for exercises than drills. Thus, the commenter recommended that the NRC change the focus to exercises.

**NRC Response:**

The Commission believes that this requirement is appropriate for inclusion in the rule as it

provides a means to share critique information and program improvements from all levels of drill or exercise participation. The Commission believes that this requirement is applicable to both drills and exercises to provide necessary information for effective performance evaluation and protective strategy improvements.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.h requirements are better suited for guidance that currently exists in NEI 03-09.

**NRC Response:**

The Commission disagrees. This section implements the requirements for the documentation of training and qualifications and records prescribed in this appendix.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.i requirements are better suited for guidance that currently exists in NEI 03-09. Also, the commenter stated that the term "all" is too inclusive and there will be times when the CAP is not the correct avenue to address an issue. Thus, the commenter recommended that the Commission delete this provision from the final rule.

**NRC Response:**

The Commission agrees in part. The Commission believes that drills and exercises have the potential to identify problems in many areas and that it is important to ensure that all such problems are addressed in a timely manner. The use of the site corrective action program ensures that issues identified can be tracked, addressed and resolved as necessary utilizing an existing licensee process. This paragraph has been revised to remove the term "all" and to be more explicit to findings, failures and deficiencies that adversely impact the protective strategy and physical protection program.

**Comment Summary:**

Another commenter stated that 10 CFR 73, Appendix B, C.3.i implies that all findings (good and bad) are required to be entered in the licensee's CAP. The commenter recommended that the NRC amend this section to ensure that only findings that impact the execution or successful implementation of the protective strategy are entered into the CAP, not all findings. Thus, the commenter recommended that the NRC revise the provision to begin as follows "Licensees shall enter all deficiencies and failures that impact the execution or successful implementation of the protective strategy, identified by..."

**NRC Response:**

The Commission agrees. See the response above.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.j requirements are better suited for guidance that currently exists in NEI 03-09. Also, the commenter stated that it is not appropriate to assume that all findings or issues need to be protected as SGI. Thus, the commenter recommended that the Commission delete "all" from this provision in the final rule.

**NRC Response:**

The Commission agrees in part. The Commission agrees that only that information regarding the effectiveness of the physical protection program that meets the criteria of 10 CFR 73.21

needs be protected as SGI. Therefore, this paragraph is revised to include the phrase “as necessary” to delineate the licensee’s responsibility to review and designate information as SGI in accordance with 10 CFR 73.21. The Commission disagrees that this requirement is better suited for guidance.

**Comment Summary:**

Similarly, another commenter stated that proposed Part 73 Appendix C, Section II (I)(2)(vi) would require all findings, deficiencies, and failures identified during drills and exercises to be protected as SGI. The commenter argued that this is an unnecessary requirement since not all findings, deficiencies, and failures meet the definition for SGI. For example, the commenter noted that “findings” can be positive versus negative, and identified “deficiencies” are typically immediately corrected/compensated, and thus are not treated as SGI.

In addition, the commenter stated that the reference to 10 CFR 73.21 is not consistent with the new SGI rule published in the Federal Register, dated October 31, 2006. Therefore, the commenter recommended that the Commission revise this provision in the final rule to state: “Licensees shall protect as safeguards information any uncorrected deficiencies, and failures identified during drills and exercises.”

**NRC Response:**

The Commission agrees in part. See the response above.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.k requirements are better suited for guidance that currently exists in NEI 03-09.

**NRC Response:**

The Commission disagrees. The Commission believes that this requirement reflects a performance based criteria that provides a measurable outcome and is appropriate for inclusion in the rule.

**Comment Summary:**

One commenter stated that 10 CFR 73, Appendix B, C.3.k.(1) is a new requirement that will require all licensees to use MILES gear for all drills and exercises. The commenter said the impact to licensees should be evaluated in the Regulatory Analysis.

**NRC Response:**

The Commission agrees in part. The use of such equipment is identified in the Regulatory Analysis. The Commission, however, does not specify a methodology or system to meet this requirement.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.k.(4) requirement is better suited for guidance that currently exists in NEI 03-09.

**NRC Response:**

The Commission disagrees. The Commission believes that this requirement reflects a performance based criteria that provides a measurable outcome and is appropriate for inclusion in the rule.

**Comment Summary:**

One commenter stated that 10 CFR 73, Appendix B, C.3.I.(1) is a new requirement for tracking individual participation in drills and exercises. The commenter noted that the security response force is a team effort and individual performance is tracked using the various firearms qualifications.

**NRC Response:**

The Commission agrees in part. The requirement to conduct quarterly tactical response drills and annual force-on-force exercises is a pre-existing requirement. The Commission's expectation is to ensure that each member of the armed response organization demonstrates the capability to effectively carry-out assigned contingency response duties and responsibilities in accordance with the licensee safeguards contingency plan and protective strategy. The Commission does not consider weapons qualification by itself, to be sufficient to demonstrate this capability and that only through a combination of training, drills, and exercises is this ability adequately demonstrated.

**Comment Summary:**

Another commenter noted that proposed Part 73 Appendix C, Section II (I)(4)(i) would require all shift personnel to participate in drills and exercises. The commenter argued that, with the existing shift makeup and work-hour restrictions, it would be impossible to comply with this proposed rule as worded. The commenter said quarterly drills and annual exercises are defined as team training in NEI 03-09, and these events are performed independent of individual participation. Thus, the commenter recommended that the Commission revise this provision by adding the phrase "To the extent practicable" to the beginning of the provision in the final rule.

As an alternative, the commenter stated that the provision should read that each member of each shift should participate in a minimum of one quarterly or one annual exercise, on an annual basis. The commenter stated that this ensures that each officer would participate in at least three drills within the three-year training cycle.

**NRC Response:**

The Commission disagrees with the recommended rule language revision to require participation in these training events "to the extent practicable". The skills associated with the effective implementation of the licensee safeguards contingency plan, protective strategy and contingency response in general are perishable skills that require continual maintenance. The Commission's expectation is to ensure that each member of the armed response organization demonstrates the capability to effectively carry-out assigned contingency response duties and responsibilities in accordance with the licensee safeguards contingency plan and protective strategy. The Commission believes the participation in the training identified in this requirement, by each member of the licensee security response organization, is essential to meet the general performance objective outlined in 10 CFR 73.55(b).

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.I.(2) requirements are better suited for guidance that currently exists in NEI 03-09.

**NRC Response:**

The Commission disagrees. The Commission believes that this requirement reflects a performance based criteria that provides a measurable outcome and is appropriate for inclusion in the rule.

**Comment Summary:**

One commenter stated that the final rule should define or describe "NRC observed exercises" to comply with the EAct. Also, the commenter asked if the requirement to mitigate a conflict of interest only applies to NRC observed exercises, as the language suggests. If so, the commenter stated that this must be changed to include all FOF exercises, not only those evaluated by NRC.

In addition, the commenter stated that that NRC must define the terms "independent" and "direct responsibility" to avoid any ambiguity as to the degree of independence required to satisfy the regulation. In order to avoid this ambiguity, the commenter said the final rule should require that the mock adversaries and plant security officers are not employed by the same security company. This would avoid even the appearance of a conflict of interest, and if properly managed could increase the level of readiness of the plant's security officers.

**NRC Response:**

The Commission agrees in part. The Commission disagrees that a definition of "NRC observed exercises" is necessary to comply with the EAct of 2005, as the EAct of 2005 applies to the NRC not to licensees. Additionally, the Commission disagrees that the provision to avoid a potential conflict of interest is necessary or efficient for exercises other than those conducted during NRC FOF inspections. The Commission believes that exercises conducted during NRC FOF inspections will identify potential flaws that may have not otherwise been revealed by a less aggressive force-on-force testing process.

The terms "independent" and "direct responsibility", as they pertain to this requirement are clarified in regulatory guidance. The Commission disagrees that it is necessary to use an independent security contractor as the mock adversary force for the (licensee supervised) annual force-on-force exercises. Such a requirement would be impractical for licensees to meet given a limited number of resources to choose from and the number of exercises that must be performed.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, C.3.n.(1) requirements are better suited for guidance that currently exists in NEI 03-09.

**NRC Response:**

The Commission disagrees. The Commission believes that this requirement reflects a performance based criteria that provides a measurable outcome and is appropriate for inclusion in the rule.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73 Appendix B, D.1.b needs additional clarification to be consistent with current regulatory requirements. Thus, the commenter recommended that the Commission add the following sentences to the end of the provision in the final rule: "The annual written exam content is described in the Commission-approved Training and Qualification plan. The performance demonstration is dependent on the skill/ability being evaluated, and will be at the periodicity defined by the licensee as determined using the Systematic Approach to Training model. In no case shall requalification periods exceed 3 years."

**NRC Response:**

The Commission disagrees with the suggested rule text change because the Commission does not intend to require a systematic approach to training for each licensee. It is the Commission's expectation that each licensee is responsible to develop and implement a qualification methodology that includes written exams and performance demonstrations as part of their training program. Written exams and hands-on performance demonstrations provide a means to demonstrate that individuals possess the knowledge, skills and abilities to perform physical protection and/or contingency response duties, whether they choose a systematic approach to training or another acceptable method for implementation of their training program. The periodicity requirements for requalification are clearly outlined in 10 CFR 73, Appendix B, D.2.a. Paragraph D.2.a does not reference or endorse the use of a specific methodology to determine requalification periodicities in lieu of the specified annual requalification.

**Comment Summary:**

Another commenter recommended that the Commission relocate the requirement for written exam to 10 CFR 73, Appendix B, F.7 because it applies to armed security officers.

**NRC Response:**

The Commission disagrees. This requirement for written exams includes both armed and unarmed individuals that may be required to perform any assigned security duties and responsibilities and shall be completed prior to assignment.

**Comment Summary:**

One commenter stated that the 10 CFR 73, Appendix B, D.2.a requirement would be a significant problem and conflicts with the T&Q allowance of a 3-year training cycle. The commenter stated that "shall be requalified at least annually" would preclude the use of the SAT process in determining training program implementation. The commenter argued that the Commission should modify this provision to credit the proper application of the SAT process by each licensee. The commenter recommended that the Commission revise proposed 10 CFR 73, Appendix B, D.2.a by deleting "at least annually" and "this appendix and".

**NRC Response:**

The Commission disagrees with the comment. The Commission does not intend to require a systematic approach to training (SAT) for each licensee. Therefore, each licensee shall requalify individuals at least annually in accordance with the requirements of this appendix and the Commission-approved training and qualification plan whether they choose an SAT or another acceptable method for implementation of their training program. Though many security duties are performed on a frequent, re-occurring basis, the knowledge, skills and abilities to perform these duties in accordance with established procedures is perishable and must be maintained to meet the requirements of 10 CFR 73.55 (b).

**Comment Summary:**

The same commenter noted that proposed 10 CFR 73 Appendix B, D.2.b and the associated SOC adds the phrase "by a qualified training instructor." The commenter argued that this blanket addition throughout proposed Appendix B will create a huge administrative burden and add additional cost as processes overseen by other organizations will now require administration by a qualified training instructor.

The commenter stated that the change is apparently an attempt to add value to the training process, but the gain is not apparent. The commenter said that the absence of a definition for

“qualified training instructor” will lead to confusion regarding compliance. The commenter concluded that the current basis for the change does not identify a performance or regulatory gap, so alternate proposals cannot be generated other than to restore the wording to that in the current Appendix B, II.E. The commenter stated that the proposed change creates a regulatory gap where none existed before.

**NRC Response:**

The Commission disagrees and has retained the proposed language as written. The Commission has determined that currently, many licensees employ training instructors to manage and direct the oversight of their security training program. The training instructor is typically responsible for the final documentation of each critical task qualification performed by individuals who are assigned duties and responsibilities identified in the Commission-approved security plans.

The requirement for a “qualified” training instructor was added to ensure that the training program is managed and designed to support the site’s response strategies and regulatory requirements by an individual who is qualified within the licensee’s program and processes to develop, implement and provide oversight of the security training program. The security supervisor shall then verify and attest to the proper documentation and completion of each individual’s training record as prepared by the qualified training instructor.

**Comment Summary:**

One commenter recommended that the Commission delete the proposed 10 CFR 73, Appendix B, E.1.b.(1) because this section addresses only the qualifications of fire arms instructors. The commenter noted that those qualifications are articulated in 10 CFR 73 Appendix B, E.1.b.(2), (3), and (4).

**NRC Response:**

The Commission disagrees. Paragraph E.1.b.(1) describes the minimum requirements for the training and qualification for each armed member of the security organization as it relates to this section of the rule.

**Comment Summary:**

One commenter stated that 10 CFR 73, Appendix B, E.1.b.(2) is too restrictive and firearms instructor certifications acceptable to law enforcement should be acceptable to the NRC. The commenter stated that the intent is that instructor certification which is adequate for State Highway Patrol, City Police or County Sheriffs, etc. should be acceptable as assurance that licensee firearms instructors will possess the requisite skills to be effective. Thus, the commenter recommended that the Commission revise proposed Part 73 Appendix B, E.1.b.(2) by adding the following sentence to the provision in the final rule: “Certification is acceptable from Colleges and Academies which provide training and certification which is accepted by local/regional law enforcement personnel.”

**NRC Response:**

The Commission agrees in part. The Commission considers law enforcement agencies (regardless of jurisdictional boundary) as a national or state recognized entity. This distinction is made resultant of the standardized doctrine shared throughout the law enforcement community especially at the level of state agencies and below.

The Commission disagrees with the inclusion of a College as meeting the intent for a



recognized national or state entity for licensee's to obtain certification for their firearms instructors. Colleges provide an individual a basic level of instruction for general topics associated to a subject. The Commission's expectation is for firearms instructors to be certified by a national or state recognized entity that has a specific program designed to certify a firearms instructor such as a federal, state or local law enforcement academy or an organization such as the National Rifle Association.

**Comment Summary:**

One commenter stated that 10 CFR 73, Appendix B, E.1.d is a new requirement that is not consistent with NRC Orders that have been proven adequate for licensee security officers to defend against the DBT. The commenter stated that to remain consistent with existing NRC approved training programs developed to implement the training Order, the Commission should revise this provision so the list is consistent with the Order list. The commenter recommended that the NRC move the list of familiarization elements to 10 CFR 73, Appendix B, E.1.c., then delete E.1.d.

**NRC Response:**

The Commission disagrees. Most of the elements listed in 10 CFR 73, Appendix B, E. 1.d. are retained from the pre-existing rule and reflect new elements that had been imposed by Commission orders. The additional items listed are not intended to be bound solely by the elements contained in the pre-existing list of the Training Order (April 2003). The additions to the list include the Commission's expectation for training and the experience gained by the NRC through nearly 30 years of security program inspections and observations.

It is the Commission's view that these proficiency standards represent the minimal common firearms practices that must be followed to ensure the safe handling, operation, and appropriate training and qualification is achieved for weapons employed by a licensee. This requirement has been revised to reflect accurate language consistent to what is used in the firearms community for the performance elements identified.

**Comment Summary:**

One commenter stated that 10 CFR 73, Appendix B, E.1.e is not a weapons familiarization training element. The commenter recommended that the NRC place this requirement into the duty training section at Appendix B, C.1.b(4) because it is more appropriate as duty training.

**NRC Response:**

The Commission agrees in part. The use of deadly force, as authorized by applicable state law, is an assigned duty of armed security personnel and needs to be included in the training program. The Commission disagrees with placing this requirement in another section of the rule based on the Commission's experience that the instruction for the use of deadly force is normally required and conducted during weapons training. Deadly force instruction is more appropriately suited to remain in the weapons training section of the rule versus the duty training section of the rule being that the use of deadly force as intended in this rule is directly related to the use of a weapon and associated training for that weapon.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73, Appendix B, E.1.f is too prescriptive. The commenter stated that because there is regulatory impact of non-compliance with this activity and time span, licensees need clarification to help ensure compliance. The commenter detailed a suggested approach for range activities, including associated conflicts with the proposed

rule. The commenter stated that 4 months does not appear to have a firm basis, although it is a good “rule of thumb.” However, the commenter noted that the problem is the non-compliance that results simply due to a time span that does not clearly relate to a demonstrated performance gap. The commenter acknowledged that the intent of this provision is good, but tracking to this level of detail adds little value while creating significant administrative and personal burden as related to range activities.

Lastly, the commenter stated that “trimester” (4-month period) is not commonly used in the nuclear industry as an interval for other qualification or surveillance activities. Thus, the commenter recommended that the Commission revise this provision in the final rule to state: *“Armed members of the security organization shall participate in weapons range activities to demonstrate that their individual performance continues to support their ability to effectively perform the duties associated with the licensees committed weapon(s). Efforts should be made to have these range activities occur on a nominal 4 month periodicity. An armed responder shall not be considered qualified if they have not fired a licensee approved course of fire within 180 days.”*

**NRC Response:**

The Commission disagrees. The Commission approved and issued the training order to all power reactor licensees in April of 2003 as a result of the terrorist attacks of September 11, 2001. This requirement is a pre-existing requirement from the training order and is included in the rule. The Commission’s intent is to ensure armed members of the security organization maintain an acceptable level of overall proficiency with assigned weapons.

**Comment Summary:**

Another commenter stated that the Commission should move proposed Part 73, Appendix B, E.1.f to Section F “Weapons Qualification and Requalification.”

**NRC Response:**

The Commission agrees in part. The requirement for range participation on a nominal four month periodicity can include weapons qualification and re-qualification. The Commission disagrees with relocating the text to paragraph F “Weapons Qualification and Re-qualification” being that the Commission’s intent for armed members of the security organization participating in weapons range activities, in this paragraph of the rule, is broader than qualification and re-qualification and could include non qualification and re-qualification weapons activities and training.

**Comment Summary:**

One commenter recommended that the Commission modify 10 CFR 73, Appendix B, F.1.a in the final rule by adding the following phrase to the end of the provision “and the results documented and retained as a record.”

**NRC Response:**

The Commission disagrees with suggested rule text addition by the commenter because 10 CFR 73, Appendix B, F.1.b contains the rule text suggested by the commenter.

**Comment Summary:**

One commenter recommended that the Commission change the title of 10 CFR 73, Appendix B, F.2, “Firearms Qualification Program” to be consistent with the program described in F.2.

**NRC Response:**

The Commission disagrees. 10 CFR 73, Appendix B, F.2 is contained within paragraph F which is titled Weapons Qualification and Requalification program.

**Comment Summary:**

One commenter stated that the requirement for shotgun proficiency has increased by 20 percent above the current requirement with no rationale provided. The commenter argued that the requirement should remain at 50 percent.

**NRC Response:**

The Commission disagrees. The shotgun qualification score was upgraded from 50 percent in the pre-existing rule, to a score of 70 percent to demonstrate an acceptable level of proficiency which is now reflected in this appendix. The NRC found 70 percent to be a professionally accepted minimum qualification score for day time shotgun proficiency in the firearms training community (local, state and federal law enforcement, National Rifle Association, IALEFI, etc.).

**Comment Summary:**

One commenter stated that the current NRC-approved industry standard for the qualifying score for the tactical qualification course is 70 percent. The commenter argued that the final rule should be consistent with SFAQ 05-10, approved on December 12, 2005.

**NRC Response:**

The Commission agrees in part. The current NRC standard of 70 percent for the tactical qualification course is stated in accepted industry and NRC guidance. The Commission, however, disagrees with the current standard of maintaining the 70 percent qualification score for the tactical course of fire. Based on professionally accepted minimum qualification scores for tactical firing proficiency in the firearms training community and the Commission's experience through the implementation of the security baseline inspection program and licensee implementation of the tactical course of fire, the Commission concludes that 80 percent is the minimum acceptable qualification score for the Tactical Qualification Course.

The primary contingency weapon employed by licensees for the success of the protective strategy is the semiautomatic rifle. The qualification courses associated with the semiautomatic rifle require a minimum qualifying score of 80 percent. The Training Order required licensees to develop a tactical course of fire to assess the shooter's physical fitness and the ability to perform realistic and simulated aspects of the sites protective strategy with all contingency equipment. A qualifying score of 80 percent is consistent with the use of the semiautomatic rifle as the primary response weapon and the goal of licensee protective strategies in which a higher degree of accuracy and a greater ammunition capacity is needed to ensure the successful neutralization of the adversarial threat.

The goals of licensee responses to the DBT through the implementation of their protective strategy correlate to the goals of Local, state and federal tactical response teams who typically require response team personnel to demonstrate a level of proficiency greater than 70 percent, due to the critical nature of their mission and to ensure overall success. Most LLEA tactical teams require 80 percent or better, to ensure the neutralization of the threat and the safety of the public through higher accuracy during tactical engagements.

**Comment Summary:**

One commenter stated that the Commission should change the title of 10 CFR 73, Appendix B,

F.4 to “Weapons Qualifications Courses” because the courses of fire are described in F.3.

**NRC Response:**

The Commission disagrees. 10 CFR 73, Appendix B, F.4 is specific to the individual courses used to describe the requirements for each course. 10 CFR 73, Appendix B, F.3 outlines the requirement for the specific type of course to be fired with each weapon, i.e. day fire or night fire.

**Comment Summary:**

One commenter recommended that the Commission remove “and scores” from 10 CFR 73, Appendix B, F.4.a.(1), which are addressed in 10 CFR 73, Appendix B, F.3.

**NRC Response:**

The Commission agrees. This paragraph has been revised to remove scores as the minimum qualification scores for all weapons are addressed previously in 10 CFR 73, Appendix B, F.3.a, F.3.b and F.3.c.

**Comment Summary:**

One commenter recommended that the Commission change the title of 10 CFR 73, Appendix B, F.5, to “Firearms Requalification” for consistency.

**NRC Response:**

The Commission agrees. The title of this paragraph is revised to “Firearms Requalification” to delineate the specific aspect of the physical protection program outlined in this requalification requirement.

**Comment Summary:**

The commenter recommended that the Commission modify 10 CFR 73, Appendix B, F.5.a by adding the phrase “and the results documented and retained as a record” to the end of the provision.

**NRC Response:**

The Commission agrees. This requirement is revised to ensure that the results of the requalification efforts are documented and retained as a record in accordance with the documentation and record keeping requirements of this appendix.

**Comment Summary:**

The commenter stated that cross-reference in 10 CFR 73, Appendix B, F.5.b should be 10 CFR 73, Appendix B, F.4, rather than F.5.

**NRC Response:**

The Commission agrees. This paragraph is revised to reference the appropriate associated paragraphs within this appendix.

**Comment Summary:**

The commenter also recommended that the NRC relocate the requirement for written exams from 10 CFR 73, Appendix B, D.1.b to a new Section F.7. The commenter recommended the following language for F.7.1:

“An Annual written exam for armed officers. The written exams must include those elements listed in the Commission approved training and qualification plan and shall require a minimum score of 70 percent to demonstrate an acceptable understanding of assigned duties and responsibilities.”

**NRC Response:**

The Commission disagrees. The requirement for written exams include both armed and unarmed individuals that may be required to perform physical protection and/or contingency response duties and shall be completed prior to assignment. The annual written exam is a qualification requirement specific to armed members of the security organization; however, the content of the exam is not solely based on firearms, therefore it is addressed more appropriately in the “Duty Qualification” paragraph of this appendix.

**Comment Summary:**

One commenter stated that the proposed Part 73 Appendix B, G.2.b provides a list of required personal protective equipment items for all armed officers, which represents a significant increase in costs to the licensee and is more stringent than current NRC Order requirements. The commenter noted that body armor is not required to be toted, but readily available should the security officer choose to wear it. Therefore, body armor can be pre-staged at assigned response positions and not every security officer is currently required to have their own body armor, as would be required under the proposed rule. In addition, the commenter noted that “duress alarms” are not considered personal equipment required for security officers and should not be listed as such.

The commenter stated that the Commission should limit the list of required equipment for response to contingency events to those personnel that the licensee has listed as responders. The Commission should not require the licensee to provide contingency response equipment for those officers not credited with that type of response. Thus, the commenter recommended that the NRC revise proposed Part 73, Appendix B, G.2.b to state: “The licensee shall provide armed security personnel *with the Commission-approved security plan personal protective equipment.*”

**NRC Response:**

The Commission agrees, in part. The Commission disagrees that this requirement is more stringent than current requirements, however, agrees with the removal of “duress alarms” from this required equipment list. This paragraph is revised to clarify the specific applicability of the required equipment listing to those armed security personnel who are responsible for the implementation of the safeguards contingency plan, protective strategy and associated implementing procedures. This revision would permit a licensee to pre-stage equipment such as body armor at designated locations consistent with their proactive strategy.

The required equipment listing under this paragraph is also revised to remove "(4) Duress alarms" as this piece of equipment is not personal equipment associated with the specific duties of armed security personnel. It is added to 10 CFR 73, Appendix B, G.2.c as an optional piece of equipment that may be made available for use in accordance with the Licensee Protective Strategy and implementation procedures.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73, Appendix B, G.2.c provides a listing of personal equipment that should be described as optional and required only based on individual

licensee protective strategy requirements. The commenter said the list should strictly be based upon the licensee's specific site protective strategy and this equipment should be provided only if required to successfully implement that protective strategy. In addition, the commenter stated that proposed Item #7 is redundant to Item #2, and the punctuation should be removed from the listing. Therefore, the commenter recommended that the Commission revise 10 CFR 73, Appendix B, G.2.c by inserting "as appropriate" after "should provide," deleting item #7, and deleting the punctuation from the items.

**NRC Response:**

The Commission agrees. This paragraph is revised to include the recommended phrase to further clarify the suggested employment and distribution of the identified equipment which should be in accordance with licensee policy and implementing procedures. The equipment listing under this paragraph was revised to include "duress alarms". The equipment identified in this listing is based upon what may be deemed by the licensee as appropriate to fulfill specific physical protection or contingency response duties, as well as, provide enhanced capabilities to the security organization during day to day security operations and during contingency events.

**Comment Summary:**

One commenter, regarding proposed 10 CFR 73, Appendix B, G.3.a, noted that this is a new requirement not in the Orders, EPAAct, or NEI 03-12. The commenter stated that the requirement for armorer certification is new, more stringent than current Order requirements, and not well-defined. The commenter stated that the proposed requirement limits licensee flexibility to use experienced personnel.

**NRC Response:**

The Commission disagrees with the commenter. The Commission's expectation is that only those individuals who are certified by the weapons manufacturer or a contractor working on behalf of the manufacturer shall be used to perform maintenance and repair of licensee firearms. Licensees may use a manufacturer's armorer and certification process or use a contractor certified by the manufacturer as an armorer to perform maintenance and repair of licensee firearms. The proposed language of this requirement is maintained in the final rule text.

**Comment Summary:**

Another commenter asked, "Who is the certifying body for the armor certifications?"

**NRC Response:**

The Commission's expectation is that only those individuals who are certified by the weapons manufacturer or a contractor working on behalf of the manufacturer shall be used to perform maintenance and repair of licensee firearms. Licensees may use a manufacturer's armorer and certification process or use a contractor certified by the manufacturer as an armorer to perform maintenance and repair of licensee firearms.

## **Part 73 Appendix C, Section II Responses to Public Comments**

### **Comment Summary:**

A commenter stated that there should be a requirement for a portable set of truck mounted emergency diesel generators parked far enough away from the site to remain protected by an accidental or deliberate air crash into the reactor site.

### **NRC Response:**

This comment is not within the scope of this rulemaking.

### **Comment Summary:**

A commenter stated that, for existing licensees, the NRC is already deploying a different and more appropriate regulatory scheme for addressing Interim Compensatory Measures (ICM) B.5.b conditions. The commenter stated noted that B.5.b is being controlled with a performance-based license condition that is satisfied by voluntary licensee commitments to B.5.b Phase 2 and Phase 3 mitigating strategies. The commenter argued that this regulatory scheme negates the need for any of the proposed changes or clarifications to Appendix C that cover how the on-site response effort is integrated to provide mitigating strategies that can be effectively implemented under the circumstances associated with loss of large areas of the plant due to explosions or fires. The commenter argued that putting this specific detail in the SCP limits the effectiveness of licensee strategies for dealing with unpredictable plant events. Thus, the commenter stated that the Commission should retain the existing regulatory approach and language.

### **NRC Response:**

The Commission agrees in part. The Commission agrees that the safeguards contingency response plan focuses on the predetermined actions of the site security force and has revised the final rule text to clarify retention of this focus by relocating the requirements pertaining to ICM B.5.b conditions to 10 CFR 50.54(hh) and retaining the requirements specific to safeguards contingency response. The detailed comments pertaining to B5.a, and B.5.b have been relocated to the portion of this document responding to 10 CFR 50.54(hh).

### **Comment Summary:**

The Commission received various comments that recommended that the Commission move all elements of the performance evaluation program of 10 CFR 73, Appendix C to Appendix B, Section C.3.

### **NRC Response:**

The Commission agrees that the performance evaluation program is a component of the training program for security force personnel based on response to contingency events and has relocated the performance evaluation program in its entirety to 10 CFR 73, Appendix B, C.3. The detailed comments pertaining to the performance evaluation program have been relocated to the comment response document for Part 73, Appendix B.

### **Comment Summary:**

The Commission received various comments that stated the requirement for the threat warning system is a new requirement beyond the scope of the Orders. The commenter noted that the

graduated protective measures were not required by the Security Orders, but were outlined in RIS 2002-12a “NRC Threat Advisory and Protective Measures System” and suggested that these requirements be removed.

**NRC Response:**

The Commission agrees in part. The requirements pertaining to the threat warning system are new to the rule, however, the industry has been implementing them since they were identified in RIS 2002-12a. The requirements for the threat warning system have been relocated to 10 CFR 73.55(k)(10) as the Commission determined that they were better suited to be addressed as a physical protection program requirement. The detailed comments pertaining to the threat warning system have been relocated to the comment response document for 10 CFR 73.55.

**Comment Summary:**

A commenter stated that the contingency response plan traditionally focused on the predetermined actions of the site security force, and the proposed changes to Appendix C expand that focus by requiring specifics on non-security response efforts to prevent significant core damage. Further, the commenter stated that the level of detail in the SCP will increase significantly if this rule language stands. Also, the commenter argued that the burden on industry is likely to be quite significant, and this impact was not evaluated in the Regulatory Analysis.

The commenter stated that, in addition to revising the existing plans to incorporate an expanded level of detail, the Commission should add new information such as Memorandum Of Understandings and operational details. In the March 9 public meeting, the Commission indicated that it is not the intent of this section to impose a significant burden on industry. The commenter stated that if it is not the Commission’s intent to impose a significant burden on industry, the Commission should revise this section and the existing rule language should only be modified to reflect requirements delineated in the Commissions Orders.

**NRC Response:**

The Commission agrees in part. The Commission agrees that the safeguards contingency response plan focuses on the predetermined actions of the site security force and has revised the final rule text to clarify retention of this focus. The Commission has determined that the changes to this appendix are consistent with current requirements for the coordination of the predetermined security force actions with those of non-security response efforts to ensure that the predetermined actions of the security force can be effectively implemented without conflict with the predetermined actions of other on-site or off-site support agencies that would be implemented concurrently or simultaneously with the security force actions.

The Commission does not intend that the SCP “include” the details of other site plans, but rather intends to ensure that the security force has considered these other plans and the potential for conflicts have been resolved. The Commission agrees that it is acceptable for the SCP to reference pertinent non-security documents in lieu of “attaching” them to the SCP and has revised this rule text to clarify this intent.

**Comment Summary:**

Two commenters stated that the details in 10 CFR 73, Appendix C are more stringent than the requirements in 10 CFR Part 73.55 pertaining to security duties and are fundamentally flawed. The commenters noted that this is especially true with respect to preventing core damage. The commenters stated that tying prevention of core damage to security performance confuses the



true security objective of defending target set elements, the loss of which may result in core damage. The commenter argued that this construction is an illogical extension of security responsibility and creates numerous interface issues with operations, emergency planning and other plant procedures and processes.

**NRC Response:**

The Commission disagrees. As noted by the commenter, the prevention of core damage during a contingency event is initially a function of security which is accomplished through target set protection. Target sets may include operator actions which have the possibility to prevent or mitigate the final outcome of significant core damage. The loss of a target set will likely result in significant core damage, or if a specific target is selected, spent fuel sabotage.

To ensure the effective protection of target sets, which may include operator actions, the Commission has established the prevention of significant core damage and spent fuel sabotage as the criteria to measure the licensee's performance to protect target sets. Significant core damage and spent fuel sabotage can be measured through accepted engineering standards, and provides measurable performance criteria relative to protection against radiological sabotage. Additionally, the terms "significant core damage" and "spent fuel sabotage" are well established and have been used consistently by the Commission and industry relative to force-on-force testing before and after September 11, 2001.

**Comment Summary:**

One commenter agreed that the security-related requirements from the security Orders should be codified, but stated that the portions of the Orders that are not security-related should not be included in the security rule. The commenter said that the proposed 10 CFR Appendix C too broadly attempts to make the SCP encompass the entire integrated plant response to all postulated events, including those beyond the DBT.

**NRC Response:**

The Commission agrees in part. The Commission agrees that some of the requirements that were contained in the proposed 10 CFR 73, Appendix C were not the responsibility of the security organization or belong in another area of the rule. This Appendix is revised to remove the requirements pertaining to the performance evaluation program, the specific B.5.a, B.5.b requirements and the requirements pertaining to the threat warning system. This revision also clarifies the focus of the safeguards contingency plan by identifying the specific responsibilities of the licensee security organization in the planning and preparation for the response to contingency events and reflects what the Commission expects to be included in a licensee's SCP.

The following proposed rule categories of information have been moved to the licensee's planning base: (5) Primary Security Functions, (6) Response Capabilities, and (7) Protective Strategy. The proposed rule category of information, (8) "Integrated Response Plan", is also removed from this appendix. The requirements associated with this paragraph have been removed or modified and relocated to other applicable areas within this appendix to reduce confusion related to the redundancy and duplication of information. In Addition, the proposed rule category of information, (9) Threat Warning System, is removed from this appendix and determined to be better suited for inclusion in 10 CFR 73.55 (k)(10). The proposed rule category of information (9) requirement regarding imminent threat is relocated to the new 10 CFR 50.54(hh)(1). The proposed rule category of information, (10) Performance Evaluation Program, is removed from this appendix in it's entirety and has been incorporated in 10 CFR 73,

Appendix B as these requirements describe the development and implementation of a training program for training the security force in response to contingency events.

**Comment Summary:**

One commenter stated that proposed 10 CFR Appendix C, Section II and associated SOCs add a requirement to include additional detailed information in the SCP, exceeding what was required for the post-DBT SCP. The commenter stated that it is unclear, after moving detail from the PSP and SCP to site procedures as part of DBT, why it is now necessary to not only restore but expand detail and move it into the SCP. The commenter argued that this is unnecessary duplication that provides no benefit and will hinder upgrades. Thus, the commenter recommended that the Commission delete the proposed additional requirements for the SCP.

**NRC Response:**

The Commission agrees in part. This appendix is revised to clarify the level of detail required to be included in the SCP, as well as, the supporting information that must be documented in implementing procedures. The Commission agrees that it is acceptable to reference rather than include specific information that exists in the PSP and has identified those areas, within this appendix, where referencing information in the SCP is acceptable.

**Comment Summary:**

One commenter stated that current SCPs are focused on events rather than threats, so the change to “threats” would cause considerable rework of the existing SCPs with no benefit to the security of licensee facilities. The commenter argued that the Commission should maintain the existing concept of response to events rather than threats. Thus, the commenter recommended that the Commission revise the provision in the final rule by replacing “threats” with “security related events”.

**NRC Response:**

The Commission agrees. The Commission agrees that the term “event” is the more appropriate term. An event includes all actions from initiation (detect) to termination (neutralize), therefore, this requirement is revised to focus on the types of actions or information that will prompt the licensee to begin and end response activities as a result of an actual event at the facility.

**Comment Summary:**

The same commenter stated that, based on a literal reading of the proposed regulation, this section is a new requirement and the Commission should retain the current rule language. If retained, the commenter recommended that the Commission revise this provision by replacing “threat condition” with “security event”.

**NRC Response:**

See the response above.

**Comment Summary:**

The commenter also stated that the detailed language within the proposed rule pertaining to the Generic Planning Base does not belong in the Generic Planning Base and thus recommended that the Commission delete this provision from the final rule.

**NRC Response:**

The Commission agrees in part that the details in the proposed rule pertaining to the Generic Planning Base did not belong under the Generic Planning Base and reflect the required elements of the Responsibility Matrix. The requirements pertaining to the Generic Planning Base have been revised to reflect elements specific to the initiation and termination of events, the goals and objectives of the licensee during these events and the data, criteria, procedures, mechanisms and logistical support necessary to achieve the objectives identified.

**Comment Summary:**

One commenter stated that 10 CFR 73, Appendix C too broadly attempts to make the SCP encompass the entire integrated plant response to all postulated events including those beyond the DBT. The commenter noted that specific SOC language in the appendix forbids reference to other site procedures (“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” would be deleted because this information would be required to be specifically detailed in contingency planning” [Section 3(e)]).

**NRC Response:**

The Commission agrees in part. The Commission agrees that some of the requirements that were contained in the proposed 10 CFR 73, Appendix C were not the responsibility of the security organization and has revised this appendix to remove those requirements. The Commission disagrees that this appendix forbids reference to other documents and has revised the final rule to clarify that it is acceptable to reference rather than include related information that exists in other documents.

**Comment Summary:**

As a general comment, another commenter stated that the proposed rule uses the words “must include” throughout. The commenter said the repeated use of this statement will significantly increase the level of detail that is placed into the Plans. The commenter noted that the philosophy for updating the plans, which was concurred with by the NRC, was to place implementation details in site procedures. The commenter concluded that it now appears that the proposed rule will result in a great deal of implementation detail being added into the plans unnecessarily.

**NRC Response:**

The Commission agrees in part. The Commission does not intend to expand the amount of information required to be “included” in the SCP. The Commission agrees that implementing details are appropriate for procedures and need not be included in the SCP, however, the Commission believes that the licensee must provide a sufficient level of detail in the SCP for the information to be understandable. This paragraph is revised to clarify what level of detail must be included in the SCP and what is expected to be specified in licensee implementing procedures.

**Comment Summary:**

One commenter stated that these requirements are more stringent than the current Orders. The commenter argued that the elements of the on-site physical protection program are adequately addressed with the requirements in 10 CFR 73.55 and are captured by the licensees in their NRC-approved PSPs. Thus, the commenter stated that it is duplicative to have these same elements repeated in the SCPs. The commenter recommended that the Commission delete these requirements from the final rule. If the Commission retains these requirements, the commenter stated that the Commission should provide an adequate basis for doing so.

**NRC Response:**

The Commission agrees in part. The Commission agrees that these requirements appear to be more stringent than what exists in current Commission orders. This appendix is revised to retain many of the current requirements in 10 CFR 73, Appendix C, incorporate the applicable requirements of the Commission orders, and update the requirements to reflect the Commission's expectation for contingency planning and performance from experience gained by the NRC through nearly 30 years of security program inspections and observations.

This revision is not intended to be bound solely to codifying the current requirements contained in the Commission orders. These requirements are intended to provide the performance-criteria for the SCP and to describe how the physical protection program provides adequate protection through the measures described in both the PSP and SCP. This appendix is revised to clarify the level of detail required to be included in the SCP, as well as, the supporting information that must be documented in implementing procedures. The Commission agrees that it is acceptable to reference rather than include specific information that exists in the PSP and has identified those areas, within this appendix, where referencing information in the SCP is acceptable.

**Comment Summary:**

One commenter noted that including a description of how command and control will be coordinated and maintained is a level of detail contained in site procedures. The commenter argued that performance-based regulation should not be written to the level of detail suggested by this provision. Thus, the commenter recommended that the Commission retain the current language to avoid adding unnecessary detail.

**NRC Response:**

The Commission disagrees. A description of how command-and-control will be maintained is needed for the understanding of how the licensee contingency response structure is managed during events. The Commission does not intend to require procedure level detail and agrees that it is acceptable to reference rather than include specific information that exists in the PSP and has identified those areas, within this appendix, where referencing information in the SCP is acceptable.

**Comment Summary:**

Regarding the proposed 10 CFR 73, Appendix C, Section II (e)(2)(I) "physical layout", one commenter stated that the proposed regulation is too prescriptive. The commenter requested that the Commission provide the regulatory basis for requiring the inclusion of maps and drawings to the level of detail delineated in the proposed rule. The commenter recommended that the Commission retain the current language to avoid adding unnecessary detail.

**NRC Response:**

The Commission disagrees. The Commission intends to require the level of detail already included in the current NRC-approved security plans and where information is documented in the PSP to comply with the requirements of the PSP (maps and drawings), this information may be identified by reference in the SCP.

**Comment Summary:**

The commenter stated that the current regulation is adequate. The commenter argued that the proposed language is too prescriptive and will result in a significant amount of work to revise site security plans. Thus, the commenter recommended that the NRC retain the current

language to avoid adding unnecessary detail.

**NRC Response:**

See the response above.

**Comment Summary:**

One commenter stated that this provision is too prescriptive and the level of detail regarding number of law enforcement personnel, types of weapons, and response time lines is more appropriate for guidance. Thus, the commenter recommended that the Commission retain the current language regarding law enforcement assistance to avoid adding unnecessary detail. The commenter also stated that this provision is too prescriptive and the level of detail regarding LLEA agreements is more appropriate for guidance. Thus, the commenter recommended that the Commission retain the current language to avoid adding unnecessary detail.

**NRC Response:**

The Commission agrees in part. The Commission agrees that certain information pertaining to law enforcement (i.e. weaponry, special capabilities etc.) is a level of detail that should be identified in implementing procedures. It is the Commission's expectation that licensees provide a listing of available law enforcement agencies and a general description of their response capabilities and their criteria for response. It is also the Commission's expectation that licensees include a discussion of working agreements or arrangements for communicating with these agencies within the SCP.

**Comment Summary:**

One commenter stated that for cases where a plant does not have armed security officers, the Commission should revise 10 CFR 73, Appendix C, 3.c.(v) to state: "The licensee shall provide an armed response team consisting of armed responders and armed security officers, to carry out response duties as described in approved security plans".

**NRC Response:**

The Commission disagrees. This is a general requirement. The licensee must describe the structure and responsibilities of only those personnel (armed responders and armed security officers) that are identified to perform contingency response duties within their Commission-approved security plans.

**Comment Summary:**

One commenter stated that # 3 in 73, Appendix C, 3.c.(v) implies that each position in the protective strategy would require a bullet resistant rated enclosure (BRE) or shielding. If this is the intent, the commenter said the costs to the licensee could be prohibitive at many facilities. The commenter argued that this requirement should be based upon the impact in successfully implementing the licensee's site protective strategy, and should be clearly defined as such. Thus, the commenter recommended that the Commission revise this provision in the final rule by adding "as described in the Commission-approved security plan" to the end of the provision.

**NRC Response:**

The Commission agrees in part. This requirement is revised to clarify the Commission expectation for the protective strategy to consider the protection of response personnel. The intent of this requirement is to support the members of the contingency response organization in

their efforts to fulfill their assigned contingency response duties. The utilization of cover provided by existing plant structures, to include the bullet resisting protected positions licensees may incorporate, is conducive to this intent. The Commission believes this requirement (# 3) is appropriately generic and, as stated, does NOT require nor does it "imply" a BRE for every position or member of the Armed Response Team. The Commission believes that this intent is adequately and appropriately represented by the final rule text.

**Comment Summary:**

Another commenter stated that the final rule should ensure that security officers with duties other than immediate armed response are not required for protection against the DBT and are not inappropriately credited in FOF exercises. The commenter noted that the proposed rule requires that licensees provide an armed response team consisting of both "armed responders" and "armed security officers." The commenter explained that the difference between the two terms is that "armed responders" cannot be assigned "any other duties or responsibilities that could interfere with response duties." "Armed security officers," on the other hand, can be assigned such duties or responsibilities. Therefore, the commenter argued that the Commission should write the final rule to clarify that only "armed responders" can be utilized in the protective strategy to protect against the DBT.

**NRC Response:**

The Commission agrees in part. This issue is specifically addressed by this final rule in 10 CFR 73.55(k) which requires that licensees document, in the Commission-approved security plans and site protective strategy, the minimum number of armed responders who are inside the protected area and are available at all times to perform response duties. Armed responders may not be assigned other duties. This requirement also allows the licensee to supplement armed responders with armed security officers, who are onsite and available at all times to perform response duties during contingency events, if the armed security officers are trained, qualified and equipped to perform these response duties and the minimum number of armed security officers is specified in the NRC-approved security plans and site protective strategy.

The Commission agrees that because armed security officers are not required for immediate response, they may be assigned other duties. However, if used, the licensee is required to specify the duties that armed security officers will perform within the protective strategy and is responsible for ensuring that other assigned duties, not required by the protective strategy, do not prevent the armed security officers from meeting their response duties and timelines as specified by the protective strategy.

For the purposes of force-on-force testing, a licensee may use less than the documented number of armed responders and armed security officers, but is explicitly prohibited from using more than the minimum number stated in the approved security plans and protective strategy. Therefore, the Commission disagrees with the recommendation to limit a licensee to only utilize armed responders designated in the Commission-approved security plans and site protective strategy to protect against the design basis threat and for the purpose of force-on-force testing.

**Comment Summary:**

A commenter stated that in the proposed rule the use of the qualifier "all" when referring to describing the types of decisions that must be made during a contingency event is too inclusive and will be impracticable to implement. Thus, the commenter recommended that the NRC revise the provision in 10 CFR 73, Appendix C, 4. by deleting "all".

**NRC Response:**

The Commission agrees that the use of “all” in this paragraph to describe all possible decisions to be made regarding a situation is beyond the scope of this requirement. This paragraph is revised to outline the specific events along with identifying the required information regarding associated responsibilities and actions that licensees shall include within their responsibility matrix.

**Comment Summary:**

Two commenters stated that 10 CFR 73, Appendix C, 5.(i) is not necessary and duplicative of the proposed requirements of 10 CFR 73.55(c)(6)(i).

**NRC Response:**

The Commission agrees in part. The requirement for implementing procedures exists in each section, or appendix of the rule which appears to be redundant; however, as each section of the rule contains requirements for differing program elements, and to ensure each program element is addressed in a document that demonstrates “how” the licensee accomplishes tasks to meet the Commission regulations, it is necessary to institute a requirement for implementing procedures in each section or appendix of the rule.

**Comment Summary:**

One commenter stated that proposed 10 CFR 73 Appendix C, Section II, records and reviews is redundant to proposed 10 CFR 73.55 records and review requirements. Thus, the commenter recommended that the Commission delete the proposed 10 CFR 73 Appendix C, Section II records and reviews.

**NRC Response:**

The NRC agrees in part and has revised this section to clarify the specific elements of the physical protection program that must be reviewed and audited as well as information required to be documented in records. The information that is required to be recorded and reviewed is specific to the safeguards contingency plan as stated in requirements (2) and (3). This revision also included modifying the language of these requirements to be consistent with all physical protection program review and record requirements.

**Comment Summary:**

A commenter stated that the language in 10 CFR 73 Appendix C, Section II, records and reviews should be consistent with that of Appendix B.I.

**NRC Response:**

See the response above.