

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE  
OFFICE OF NUCLEAR REACTOR REGULATION  
WASHINGTON, D.C. 20555-0001

July 18, 2005

NRC BULLETIN 2005-02: EMERGENCY PREPAREDNESS AND RESPONSE ACTIONS  
FOR SECURITY-BASED EVENTS

**ADDRESSEES**

All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operation and have certified that fuel has been removed from the reactor vessel.

**PURPOSE**

The U.S. Nuclear Regulatory Commission (NRC) is issuing this bulletin to:

1. Notify addressees about NRC staff's need for information associated with emergency preparedness (EP) for security-based events at a nuclear power plant;
2. Request addressees provide information to the NRC within 30 days of this bulletin regarding actions taken or planned to be taken in the areas discussed below:
  - a. Security-based emergency classification levels and emergency action levels (EALs), emergency response organization augmentation for security-based events, and a security-based EP drill and exercise program,
  - b. Accelerated NRC notifications and onsite protective measures;
3. If actions regarding the topics covered in this bulletin have not been taken, the addressees are requested to provide a schedule detailing expected completion dates for all pending activities; and
4. Require addressees to provide a written response to the NRC in accordance with 10 CFR 50.54(f).

**BACKGROUND**

EP measures are designed to address a wide range of event scenarios. Following the terrorist attacks of September 11, 2001, the NRC evaluated the EP planning basis, issued orders

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requiring compensatory measures for nuclear security and safety, and observed licensee performance during security-based EP drills and exercises and security force-on-force exercise evaluations. Additionally, the staff reviewed current public radiological protective action guidance. The staff also discussed security-based EP issues with various stakeholders, including licensees and Federal, State and local government officials.

Based on the information obtained, the staff determined that the EP basis remains valid, but recognized that security events differ from accident-initiated events. The information in this bulletin does not indicate that additional or earlier radiological protective actions are required to ensure dose avoidance. However, this bulletin conveys that a security-based event may introduce the need to relay information or protect plant personnel in a manner different from events for which licensees and offsite response organizations typically plan and train. Licensees have reviewed and improved their programs in response to: 1) orders issued on February 25, 2002; 2) information provided in Regulatory Issues Summary (RIS) 2004-15; 3) lessons learned from force-on-force exercises; and 4) information provided in regional outreach meetings and other forums. Although many licensees have improved their programs, additional security-based EP actions may be appropriate.

## **DISCUSSION**

The staff has identified the need for additional information to determine the following:

1. How emergency classification schemes address security-based events including threat notifications.
2. How timely licensees notify the NRC of security-based events, and how this timing relates to NRC notification of other licensees that may be potentially affected by coordinated security-based events and NRC notification of Federal agencies in accordance with the National Response Plan.
3. How onsite protective action plans for licensee personnel consider possible attack scenarios, particularly when radiological exposure is not the primary threat to personnel safety.
4. How alternative locations for onsite emergency response facilities support EP functions during a security-based event.
5. How current EP drill and exercise programs prepare or evaluate responders for security-based events commensurate with established EP standards.

The purpose of this bulletin is to obtain information regarding changes licensees have made or plan to make concerning security-based emergency preparedness program capabilities and to evaluate how consistently such changes have been implemented.

The program areas that are of specific interest to the staff are:

- A. Security-based Emergency Classification Levels and Emergency Action Levels

As a result of improvements in Federal agencies' information sharing and assessment capabilities, security-based emergency declarations could be accomplished in a more anticipatory manner than the current declarations for security events. Additionally, it is appropriate to declare emergency conditions when the physical security of the site is challenged or breached. In the course of a security-based event, emergency response actions can be implemented earlier. Attachment 2 contains information for security-based emergency classification levels and EALs to assist licensees in developing responses to the information requested in this bulletin.

#### B. NRC Notifications

Prompt notification of the NRC is particularly important during a security event to support subsequent notifications made by the NRC to other licensees regarding a potential security threat and to inform other Federal agencies in accordance with the National Response Plan. NRC regulations currently require notification to the NRC for safeguards events under 10 CFR 73.71. Additionally, safeguards events that warrant a declaration under the site's emergency plan would be reported to the NRC as required by 10 CFR 50.72. It is important to note that pursuant to 10 CFR 73.71, a time period up to one hour may elapse from discovery of the event to NRC notification. Further, 10 CFR 50.72 allows for reporting up to an hour from emergency classification. In the post-9/11 environment, there is a potential for coordinated attacks on multiple facilities. The staff finds that a notification time period of approximately 15 minutes from discovery of a security-based event to NRC notification would allow the NRC to more quickly notify other licensees and Federal agencies.

The information in this bulletin should not be construed to imply that immediate notifications to local law enforcement will be adversely affected by the prompt NRC notification. In addition, the required licensee notification to State and local governmental agencies within 15 minutes after declaring an emergency will not be changed by any information in this bulletin.

Attachment 3 of this Bulletin provides additional information related to notification for security-based events. If changes are made to the timeliness of NRC notification for security-based events, then the staff requests addressees to implement those provisions within 60 days of the bulletin's issuance and include the changes in the licensee's notification procedures. The NRC is considering future regulatory actions and the information requested in this bulletin will indicate if there is a need for additional regulatory measures.

#### C. Onsite Protective Measures

Onsite protective actions are intended to maximize site personnel safety during emergency conditions. An Alert or higher emergency declaration is generally accompanied by procedurally described actions for site assembly, accountability measures, site evacuation, activation of emergency response facilities and other actions. Although these actions are appropriate for some emergencies, other actions may be more appropriate for a terrorist attack, particularly an aircraft attack. Licensees have made onsite protective action changes through the modification of page announcements and emergency response organization augmentation instructions, but certain security-based scenarios could warrant consideration of other onsite protective actions.

Attachment 4 of this bulletin provides additional information on onsite protective actions for security-based events.

#### D. Emergency Response Organization Augmentation

The emergency response organization is expected to be staged in a manner that supports rapid response to limit or mitigate site damage or the potential for an offsite radiological release. Some licensees have chosen not to activate elements of the emergency response organization during a security-based event until the site is secured. It is prudent to fully activate emergency response organization members for off-normal hours events to promptly staff alternative facilities. This will minimize delay in overall site response. During normal working hours, licensees should consider deployment of onsite emergency response organization personnel to an alternative facility near the site. It is appropriate for such alternative facilities to have equipment to support emergency response functions.

Attachment 5 provides additional information on staff augmentation and facility considerations.

#### E. Drill and Exercise Program

It is recognized that the security at nuclear power plants is robust. In addition, current assessments indicate that licensee measures are available to mitigate the effects of terrorist acts. Consequently, such acts would not create an accident that causes a larger release or one that occurs more quickly than those already addressed by the EP planning basis. However, the condition of the plant after such an event could be very different from the usual condition practiced in more conventional nuclear power plant EP drills and exercises. In light of the foregoing and of the post-9/11 threat environment, licensees should exercise and test security-based EP capabilities as an integral part of the licensee's emergency response capabilities.

Attachment 6 of this bulletin provides additional information regarding security-based drill and exercise programs.

### **APPLICABLE REGULATORY REQUIREMENTS**

The standard for adequate nuclear power reactor EP is given in 10 CFR 50.47(a)(1) and (2). These regulations state that before issuing a nuclear power reactor operating license, the NRC must find reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The finding of reasonable assurance is based on the applicant's compliance with the regulations, as well as the applicant's demonstration of effective emergency plan implementation.

The regulatory basis for EP is largely in the 16 planning standards in 10 CFR 50.47(b), the emergency planning zone (EPZ) requirements of 10 CFR 50.47(c)(2) and the requirements of Appendix E to Part 50. These regulations are supported by the guidance of NUREG-0654, "A Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980.

The EP cornerstone of the Reactor Oversight Process identifies the risk-significant planning standards as 10 CFR 50.47(b)(4), (5), (9) and (10), which address the EP functions of event

classification, notification of the offsite response organization and offsite decisions for notification of the public, assessment of radiological impact and protective action recommendation and implementation.

Lastly, the compensatory measures imposed pursuant to the NRC Order of February 25, 2002, included direction to “review Safeguards and Emergency Plans and take actions to ensure that emergency onsite staffing, facilities and procedures are adequate to accomplish actions necessary for response to terrorist threats.”

### **REQUESTED ACTION FOR ADDRESSEES**

Licenses are requested to respond to the questions provided in this bulletin regarding the implementation of EP program standards in light of security-based events. Licensees are requested to respond to the questions in a format similar to that provided in Attachment 1. If licensees adopt changes as written in Attachments 2 through 6 of this bulletin, the staff would agree that those changes, on their own, would probably not pose a decrease in effectiveness to the licensee’s emergency plan and could be performed under 10 CFR 50.54(q) without the NRC’s prior approval.

Responses from licensees should include any actions taken (as they relate to the areas discussed in this bulletin) in response to orders of February 25, 2002, RIS 2004-15 and lessons learned from industry participation in the force-on-force pilot, transition and evaluated exercises. Prior to submission to the NRC, licensees should evaluate responses for proprietary, sensitive or safeguards information. Any information submitted to the NRC that is proprietary, sensitive or safeguards information should be marked appropriately.

Within 30 days of the date of this bulletin:

- A. Addressees are requested to provide information related to changes to emergency classification levels and EALs, specifically:
  - 1) Do you have provisions in place regarding the information provided in the bulletin?
  - 2) If you do not have provisions in place, do you plan to make changes to address the information?
  - 3) If you are making changes to your program, when will you complete those changes?
  - 4) Provide a summary discussion of provisions in place, planned, or if different from the provisions described in this bulletin, a description of how the provisions selected by the licensee differ from those described in this bulletin, and how they adequately address the areas covered by this bulletin.
  
- B. Addressees are requested to provide information related to changes in notifications to the NRC following the identification of a security-based threat, specifically:
  - 1) Do you have provisions in place regarding the information provided in the bulletin?

- 2) If you do not have provisions in place, do you plan to make changes to address the information?
  - 3) If you are making changes to your program, when will you complete those changes?
    - a) Is specific discussion of the capability to notify the NRC within 15 minutes of the discovery of a threat or attack in your notification procedures?
    - b) If not, will you voluntarily incorporate the 15 minute notification to the NRC into your notification procedures?
  - 4) Provide a summary discussion of provisions in place, planned, or if different from the provisions described in this bulletin, a description of how the provisions selected by the licensee differ from those described in this bulletin, and how they adequately address the areas covered by this bulletin.
- C. Addressees are requested to provide information related to providing adequate protective actions for licensee onsite personnel, specifically:
- 1) Do you have provisions in place regarding the information provided in the bulletin?
  - 2) If you do not have provisions in place, do you plan to make changes to address the information?
  - 3) If you are making changes to your program, when will you complete those changes?
  - 4) Provide a summary discussion of provisions in place, planned, or if different from the provisions described in this bulletin, a description of how the provisions selected by the licensee differ from those described in this bulletin, and how they adequately address the areas covered by this bulletin.
- D. Addressees are requested to provide information related to emergency response organization augmentation practices regarding relocation to alternative emergency response facilities, specifically:
- 1) Do you have provisions in place regarding the information provided in the bulletin?
  - 2) If you do not have provisions in place, do you plan to make changes to address the information?
  - 3) If you are making changes to your program, when will you complete those changes?
  - 4) Provide a summary discussion of provisions in place, planned, or if different from the provisions described in this bulletin, a description of how the provisions selected by the licensee differ from those described in this bulletin, and how they adequately address the areas covered by this bulletin.

- E. Addressees are requested to provide information related to the inclusion of security-based elements in the emergency preparedness drill and exercise program, specifically:
- 1) Do you have provisions in place regarding the information provided in the bulletin?
  - 2) If you do not have provisions in place, do you plan to make changes to address the information?
  - 3) If you are making changes to your program, when will you complete those changes?
  - 4) Provide a summary discussion of provisions in place, planned, or if different from the provisions described in this bulletin, a description of how the provisions selected by the licensee differ from those described in this bulletin, and how they adequately address the areas covered by this bulletin.

### **REQUIRED RESPONSE**

The required written response should be addressed to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, 11555 Rockville Pike, Rockville, MD 20852, under oath or affirmation pursuant to the provisions of Section 182a of the Atomic Energy Act of 1954, as amended and 10 CFR 50.54(f). In addition, a copy of the response should be submitted to the appropriate regional administrator. Prior to submission to the NRC, licensees should evaluate responses for proprietary, sensitive or safeguards information. Any information submitted to the NRC that is proprietary, sensitive, or safeguards information should be marked appropriately. The addressees have two options:

- (1) addressees may choose to submit written responses providing the information requested above within the requested time periods, or
- (2) addressees who cannot meet the requested completion dates are required to submit written responses within 15 days of the date of this bulletin. The responses must address any alternative course of action proposed, including the basis for the acceptability of the proposed alternate course of action.

### **REASONS FOR INFORMATION REQUEST**

This information request is necessary to determine the status of licensee programs regarding the adequate and consistent implementation of EP program standards in light of security-based events. The staff will use the information to inform the Commission and determine whether additional actions are required to ensure that public health and safety is maintained during and following security-based events in the post-9/11 environment.

### **RELATED DOCUMENTATION**

- Commission Order of February 25, 2002
- Regulatory Issue Summary (RIS) 2004-15, "Emergency Preparedness Issues: Post 9/11," issued October 18, 2004,

## **BACKFIT DISCUSSION**

As a result of the staff's review of security-based emergency preparedness measures implemented by licensees in response to NRC orders, advisories, and other generic communications, additional security-based EP actions might be necessary for some licensees. The Commission approved the communication of enhancements to emergency preparedness and response issues to licensees with emphasis on the prompt notification to the NRC for security-based events. Although this bulletin does not require licensees to implement the enhancements, this information is communicated to licensees for assistance in providing a response to the staff's questions on the adequate and consistent implementation of EP program standards in light of security-based events. In parallel, though not encompassing all the items discussed in this bulletin, the staff is currently pursuing rulemaking on changes to 10 CFR 73.71 to codify a shorter NRC notification time period after a security event.

In sum, this bulletin does not impose a backfit. This bulletin requests licensees to provide information in accordance with an existing requirement to respond pursuant to Section 182.a. of the Atomic Energy Act of 1954, as amended, and 10 CFR 50.54(f).

## **FEDERAL REGISTER NOTIFICATION**

A notice of opportunity for public comment on this bulletin was not published in the *Federal Register* because NRC is requesting information from affected licensees, on an expedited basis, to assess the adequacy and consistency of EP programs.

## **SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT**

The NRC has determined that only item B (NRC Notifications) of this bulletin is considered a rule under the Small Business Regulatory Enforcement Fairness Act of 1996. Nothing else in this bulletin is subject to the act.

## **PAPERWORK REDUCTION ACT STATEMENT**

This bulletin contains information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). These information collections were approved by the Office of Management and Budget, approval numbers 3150-0011 and 3150-0002.

The burden to the public for these voluntary information collections is estimated to average 200 hours per response by all 64 sites, including time for reviewing instructions, searching data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of these information collections, including suggestions for reducing the burden, to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission,

Washington, DC 20555-0001, or by Internet electronic mail to [INFOCOLLECTS@NRC.GOV](mailto:INFOCOLLECTS@NRC.GOV); and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0011, 3150-0002), Office of Management and Budget, Washington, DC 20503.



Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

**CONTACT**

Please direct any questions about this matter to the technical contacts or the lead project manager listed below.

*/RA/*

Bruce A. Boger, Director  
Division of Inspection Program Management  
Office of Nuclear Reactor Regulation

|                     |  |  |
|---------------------|--|--|
| Technical Contacts: | Greg Casto, NSIR<br>301-415-4072<br>E-mail: <a href="mailto:gac@nrc.gov">gac@nrc.gov</a> | Michael Norris, NSIR<br>301-415-4098<br>E-mail: <a href="mailto:mbn@nrc.gov">mbn@nrc.gov</a> |
|---------------------|--|--|

Lead Project Manager: Douglas Pickett, NRR  
301-415-1364  
E-mail: [dvp1@nrc.gov](mailto:dvp1@nrc.gov)

Note: NRC generic communications may be found on the NRC public Website, <http://www.nrc.gov>, under Electronic Reading Room/Document Collections.

Attachments: As stated

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**/RA/**

Bruce A. Boger, Director  
Division of Inspection Program Management  
Office of Nuclear Reactor Regulation

Technical Contacts:      Greg Casto, NSIR                      Michael Norris, NSIR  
   301-415-4072                              301-415-4098  
   E-mail: [gac@nrc.gov](mailto:gac@nrc.gov)                      E-mail: [mbn@nrc.gov](mailto:mbn@nrc.gov)

Lead Project Manager:    Douglass Pickett, NRR  
   301-415-1364  
   E-mail: [dvp1@nrc.gov](mailto:dvp1@nrc.gov)

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Attachments: As stated

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\* See Previous Concurrence

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| DATE   | 5/19/2005      | 5/19/2005     | 5/19/2005     | 5/19/2005     | 5/19/2005      |             |

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**Response to Bulletin 2005-02**

Plant: \_\_\_\_\_ Docket No(s): \_\_\_\_\_

| Response Area  | 1) Do you have provisions in place regarding the information provided in the bulletin?<br><br>(Yes/No) | 2) If you do not have provisions in place, do you plan to make changes to address the information?<br><br>(Yes/No) | 3) If you are making changes to your program, when will you complete those changes?<br><br>(Date)   | 4) Provide a summary discussion of provisions in place, planned, or if different from the provisions described in this bulletin, a description of how the provisions selected by the licensee differ from those described in the bulletin, and how they adequately address the areas covered by the bulletin. |
|--|--|--|---|---|
| <b>A. Security-based Emergency Classification Levels and Emergency Action Levels</b> |  |  |   |   |
| <b>B. NRC Notifications</b>  |  |  | 3a) Is specific discussion of the capability to notify the NRC within 15 minutes of the discovery of a threat or attack in your notification procedures?(Yes/No)<br><br>3b) If not, will you voluntarily incorporate the 15 minute notification to the NRC into your notification procedures?(Yes/No) |   |
| <b>C. Onsite Protective Actions</b>  |  |  |   |   |
| <b>D. Emergency Response Organization Augmentation</b>                               |  |  |   |   |
| <b>E. Drill and Exercise Program</b>   |  |  |   |   |

Additional information may be included on separate sheets, as necessary. In separate response, addressees are requested to label responses clearly, such as including corresponding letter/number references (example, "B.3.a")

## **Examples of Acceptable Changes to Emergency Classification Levels and Emergency Action Levels for Security Events**

### **Background Information**

As a result of improvements in Federal agency information sharing and assessment capabilities, security-based emergency declarations can be more anticipatory than declarations used for accidental events so that emergency response actions can be implemented earlier. Emergency plans should appropriately recognize those improvements and adopt modifications to the emergency classification schemes in two areas, the emergency classification level definitions and the emergency action levels (EALs). This attachment contains acceptable modifications to security-based emergency classification levels and EALs. If licensees adopt changes as written in the Attachments of this bulletin, the staff would agree that those changes, on their own, would probably not pose a decrease in effectiveness to the licensee's emergency plan and could be performed under 10 CFR 50.54(q) without the NRC's prior approval:

- The changes to the emergency classification level definitions specifically incorporate the security-based component as written in this attachment. Emergency plans and procedures should be modified to adopt these definitions.
- To ensure an appropriate level of response to a security-based event at a nuclear power plant, new EALs should be added and existing EALs revised in emergency plans and procedures, as appropriate. This attachment contains the changes in a general summary and in three separate formats suitable for EAL sets based on NUREG-0654, NUMARC/NESP-007, and NEI 99-01.
- Licensees that currently have EAL submittals on the docket for NRC approval (i.e., submittals to convert from one scheme to another) will continue the amendment process and should incorporate the enhanced EAL scheme under 10 CFR 50.54(q) into their currently in use EALs. After NRC approval of the EAL submittals, the enhanced EALs should be incorporated into the approved EALs in accordance with this bulletin and then implemented.

### **Definitions**

#### **HOSTILE ACTION:**

An act toward an NPP or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included.

HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the NPP. Non-terrorism-based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area).

## **Emergency Classification Level Changes**

The following provides a revision to the description of the emergency classification levels (ECLs) to include a security-based perspective:

### **Notification of Unusual Event**

Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

### **Alert**

Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

### **Site Area Emergency**

Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public or security events that result in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.

### **General Emergency**

Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

These revisions are based on the challenge posed by terrorist events rather than current plant status. Nuclear accident progression considers the unlikely occurrence of multiple failures and the defense-in-depth provided by plant design. The ECL definitions incorporate the intentional harm and destruction of a hostile action that could lead to a radiological release. Consequently, these descriptors and the EALs that follow are intended to be more proactive and to initiate response measures not previously considered. This is considered appropriate because of the nature and indeterminate magnitude of the potential for harm during terrorist events.

## **NUREG-0654 Guidance**

Modify the ECL definitions as provided in this attachment.

Add the definition for HOSTILE ACTION as provided in this attachment.

Delete any existing ISFSI Security EAL because it is replaced by either HOSTILE ACTION EAL or Site Attack EAL.

Replace existing NUREG-0654 General Emergency Example #3 (Loss of physical control of the facility) with NEI 99-01 HG1.

The following are the Security EALs for NUREG-0654 users. The basis for these EALs is this bulletin. Training materials should be derived from the basis provided in the NEI 99-01, Rev. 4 guidance included in this attachment. Verify that your EAL sets include the following security-based EALs:

### **Unusual Event**

1. Security threat or attempted entry or attempted sabotage. (NUREG-0654 UE Example #12)
2. A credible site specific security threat notification. (2002 Security order)
3. A validated notification from NRC providing information of an aircraft threat greater than 30 minutes away. (BL 2005-02)

Add a note to your existing EAL sets to ensure that NUREG-0654, UE Example EAL# 14 remains applicable for other hazards being experienced or projected.

### **Alert**

1. Ongoing security compromise. (NUREG-0654 ALERT Example #16)
2. A validated notification from NRC of an airliner attack threat less than 30 minutes away. (BL 2005-02)
3. A notification from the site security force of an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION within the OCA. (BL 2005-02)

Add a note to your existing EAL sets to ensure that NUREG-0654, Alert Example EAL# 18 remains applicable for other hazards being experienced or projected.

### **Site Area Emergency**

1. Imminent loss of physical control of the plant. (NUREG-0654 Site Area Emergency Example #14)
2. A notification from the site security force that an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION is occurring or has occurred within the protected area. (BL 2005-02)

Add a note to your existing EAL sets to ensure that NUREG-0654, Site Area Emergency Example EAL# 16 remains applicable for other hazards being experienced or projected with plant not in cold shutdown.

### **General Emergency**

1. A HOSTILE FORCE has taken control of plant equipment such that plant personnel are unable to operate equipment required to maintain safety functions.

**NUMARC/NESP-007 (Revised)**

Recognition Category H  
Hazards and Other Conditions Affecting Plant Safety

**INITIATING CONDITION MATRIX**

| <b>NOUE</b>  | <b>ALERT</b>  | <b>SITE AREA EMERGENCY</b>  | <b>GENERAL EMERGENCY</b>  |
|--|---|---|---|
| <b>HU1</b> Natural and Related Destructive Phenomena Affecting the PROTECTED AREA.<br><i>Op. Modes: All</i>                                  | <b>HA1</b> Natural and Related Destructive Phenomena Affecting the Plant VITAL AREA.<br><i>Op. Modes: All</i>   |   |   |
| <b>HU2</b> FIRE Within PROTECTED AREA Boundary Not Extinguished Within 15 Minutes of Detection.<br><i>Op. Modes: All</i>                     | <b>HA2</b> FIRE or EXPLOSION Affecting the Operability of Plant Safety Systems Required to Establish or Maintain Safe Shutdown.<br><i>Op. Modes: All</i>                                    |   |   |
| <b>HU3</b> Release of Toxic or Flammable Gases Deemed Detrimental to Safe Operation of the Plant.<br><i>Op. Modes: All</i>                   | <b>HA3</b> Release of Toxic or Flammable Gases Within a Facility Structure Which Jeopardizes Operation of Systems Required to Establish or Maintain Cold Shutdown.<br><i>Op. Modes: All</i> |   |   |
| <b>HU4</b> Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant.<br><i>Op. Modes: All</i>    | <b>HA4</b> Security Event in a Plant PROTECTED AREA.<br><i>Op. Modes: All</i>   | <b>HS1</b> Security Event in a Plant VITAL AREA<br><i>Op. Modes: All</i>  | <b>HG1</b> Security Event Resulting in Loss of Ability to Reach and Maintain Cold Shutdown.<br><i>Op. Modes: All</i>                                    |
| <b>HU5</b> Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of a NOUE.<br><i>Op. Modes: All</i> | <b>HA6</b> Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of an Alert.<br><i>Op. Modes: All</i>  | <b>HS3</b> Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of Site Area Emergency.<br><i>Op. Modes: All</i> | <b>HG2</b> Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of General Emergency.<br><i>Op. Modes: All</i> |
|  | <b>HA5</b> Control Room Evacuation Has Been Initiated.<br><i>Op. Modes: All</i>   | <b>HS2</b> Control Room Evacuation Has Been Initiated and Plant Control Cannot Be Established.<br><i>Op. Modes: All</i>                                   |   |
|  | <b>HA7</b> Notification of an Airborne Attack Threat<br><i>Op. Modes: All</i>   | <b>HS4</b> Site Attack<br><i>Op. Modes: All</i>   |   |
|  | <b>HA8</b> Notification of HOSTILE ACTION within the OCA<br><i>Op. Modes: All</i>   |   |   |



## **NUMARC/NESP-007 Guidance**

Modify the ECL definitions as provided in this attachment.

Add the definition for HOSTILE ACTION as provided in this attachment.

Delete existing EALS as follows:

1. HU4 EAL1 (Bomb device discovered within plant Protected Area and outside the plant Vital Area) because it is replaced by the new HOSTILE ACTION EAL HA8.
2. HA4 EAL1 (Intrusion into the PROTECTED AREA by a HOSTILE FORCE) because it is replaced by the new HOSTILE ACTION EAL HS4.
3. Any existing ISFSI Security EAL because it is replaced by either HOSTILE ACTION EAL HA8 or Site Attack EAL HS4.
4. Delete existing HG1 and replace with NEI 99-01 HG1.

The following is a summary of the Security initiating conditions (ICs)/EALs for NESP-007 users. Detailed bases for each IC/EAL follow this summary. Verify that your EAL sets include the following Security-related EALS:

### **HU4 Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant:**

**Example EALs:** (1 or 2 or 3)

1. Other security events as determined from (site-specific) Safeguards Contingency Plan. (Existing NESP-007 HU4 EAL2)
2. A credible site-specific security threat notification. (2002 Security Order)
3. A validated notification from NRC providing information of an aircraft threat greater than 30 minutes away. (BL 2005-02)

### **HA4 Security Event in a Plant PROTECTED AREA**

1. Other security events as determined from (site-specific) Safeguards Contingency Plan. (Existing NESP-007 HA4 EAL2).

### **HA7 Notification of an Airborne Attack Threat**

1. A validated notification from NRC of an airliner attack threat less than 30 minutes away. (BL 2005-02)

### **HA8 Notification of HOSTILE ACTION within the OCA**

1. A notification from the site security force that an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION is occurring or has occurred within the OCA. (BL 2005-02)

### **HS1 Security Event in a Plant Vital Area**

1. Other security events as determined from (site-specific) Safeguards Contingency Plan. (Existing NESP-007 HS1 EAL2)

**HS4            Site Attack**

1. A notification from the site security force that an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION is occurring or has occurred within the protected area. (BL 2005-02)

**HG1            Security Event Resulting in Loss of Physical Control of the Facility.**

1. A HOSTILE FORCE has taken control of plant equipment such that plant personnel are unable to operate equipment required to maintain safety functions. (Existing NEI 99-01 HG1 EAL1)

**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

**UNUSUAL EVENT**

**HU4            Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant.**

**OPERATING MODE APPLICABILITY:**            All

**EXAMPLE EMERGENCY ACTION LEVELS:**    (1 or 2 or 3)

1.    Other security events as determined from (site-specific) Safeguards Contingency Plan.
2.    A credible site-specific security threat notification.
3.    A validated notification from NRC providing information of an aircraft threat greater than 30 minutes away.

**BASIS:**

EAL 1 is based on the (site-specific) Safeguards Contingency Plan. Security events which do not represent at least a potential degradation in the level of safety of the plant are reported under 10 CFR 73.71 or in some cases under 10 CFR 50.72.

The intent of EAL 2 is to ensure that appropriate notifications for the security threat are made in a timely manner. Only the plant to which the specific threat is made need declare the Notification of an Unusual Event. The determination of "credible" is made through use of information found in the (site-specific) Safeguards Contingency Plan.

The intent of EAL 3 is to ensure that notifications for the security threat are made in a timely manner and that Offsite Response Organizations and plant personnel are at a state of heightened awareness regarding the credible threat. Only the plant to which the specific threat is made need declare the Notification of Unusual Event. This EAL is met when a plant receives information regarding an aircraft threat from the NRC and the aircraft is more than 30 minutes away from the plant. It is not the intent of this EAL to replace existing non-terrorist related EALs involving aircraft.

**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

**ALERT**

**HA4 Other security events as determined from (site-specific) Safeguards Contingency Plan.**

**OPERATING MODE APPLICABILITY:** All

**EXAMPLE EMERGENCY ACTION LEVEL:**

1. Other security events as determined from (site-specific) Safeguards Contingency Plan.

**BASIS:**

This class of security events represents an escalated threat to plant safety above that contained in the Unusual Event.

Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.

**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

**ALERT**

**HA7        Notification of an Airborne Attack Threat.**

**OPERATING MODE APPLICABILITY:**        All

**EXAMPLE EMERGENCY ACTION LEVEL:**

1. A validated notification from NRC of an airliner attack threat less than 30 minutes away.

**BASIS:**

The intent of this EAL is to ensure that notifications for the security threat are made in a timely manner and that Offsite Response Organizations and plant personnel are at a state of heightened awareness regarding the credible threat. Only the plant to which the specific threat is made need declare the Alert. This EAL is met when a plant receives information regarding an airliner attack threat from NRC and the airliner is less than 30 minutes away from the plant.

This EAL is intended to address the contingency of a very rapid progression of events due to an airborne terrorist attack such as that experienced on September 11, 2001. This EAL is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from such an attack. Although consequence analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and encouraged to activate (if they do not normally) to be better prepared should it be necessary to consider further actions. Airliner is meant to be interpreted as the size of aircraft defined in the site-specific procedure developed for response to airborne threats. The status of the plane is provided by NORAD through the NRC.

**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

**ALERT**

**HA8        Notification of HOSTILE ACTION within the OCA.**

**OPERATING MODE APPLICABILITY:**            All

**EXAMPLE EMERGENCY ACTION LEVEL:**

1. A notification from the site security force that an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION is occurring or has occurred within the OCA.

**BASIS:**

This EAL is intended to address the potential for a very rapid progression of events due to a terrorist attack including:

- air attack (airliner impacting the OCA)
- land-based attack (HOSTILE FORCE progressing across licensee property or directing projectiles at the site)
- waterborne attack (HOSTILE FORCE on water attempting forced entry or directing projectiles at the site)
- BOMBS

This EAL is not intended to address incidents that are accidental or acts of civil disobedience, such as hunters or physical disputes between employees within the OCA or PA. That initiating condition is adequately addressed by other EALs.

This EAL is not premised solely on adverse health effects caused by a radiological release. Rather the issue is the immediate need for assistance due to the nature of the event and the potential for significant and indeterminate damage. Although NPP security officers are well trained and prepared to protect against HOSTILE ACTION, it is appropriate for Offsite Response Organizations to be notified and encouraged to begin activation (if they do not normally) to be better prepared should it be necessary to consider further actions.

This EAL is intended to address the contingency for a very rapid progression of events due to an airborne terrorist attack such as that experienced on September 11, 2001, and the possibility for additional attacking aircraft. It is not intended to address accidental aircraft impact as that initiating condition is adequately addressed by other EALs. This EAL is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from additional attack elements. Although consequence analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and to activate in order to be better prepared to respond should protective actions become necessary. Federal agencies are expected to assist in the

determination whether the aircraft impact was accidental or an attack. The Federal agency maybe NORAD, FBI, FAA, or NRC. However, the declaration should not be unduly delayed pending Federal notification. Airliner is meant to be interpreted as the size of aircraft defined in the site-specific procedure developed for response to airborne threats.

This IC/EAL addresses the immediacy of an expected threat arrival or impact on the site within a relatively short time. The fact that the site is an identified attack candidate with minimal time available for further preparation requires a heightened state of readiness and implementation of protective measures that can be effective (onsite evacuation, dispersal, or sheltering) before arrival or impact.

**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

**SITE AREA EMERGENCY**

**HS1 Security Event in a Plant Vital Area.**

**OPERATING MODE APPLICABILITY:** All

**EXAMPLE EMERGENCY ACTION LEVEL:**

1. Other security events as determined from (site-specific) Safeguards Contingency Plan.

**BASIS:**

This class of security events represents an escalated threat to plant safety above that contained in the Alert IC.

Multi-unit stations with shared safety functions should further consider how this IC may affect more than one unit and how this may be a factor in escalating the emergency class.



**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

**SITE AREA EMERGENCY**

**HS4 Site Attack.**

**OPERATING MODE APPLICABILITY:** All

**EXAMPLE EMERGENCY ACTION LEVEL:**

1. A notification from the site security force that an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION is occurring or has occurred within the protected area.

**BASIS:**

This class of security events represents an escalated threat to plant safety above that contained in the Alert IC in that a hostile force has progressed from the Owner Controlled Area to the Protected Area.

Although NPP security officers are well trained and prepared to protect against HOSTILE ACTION, it is appropriate for Offsite Response Organizations to be notified and encouraged to begin preparations for public protective actions (if they do not normally) to be better prepared should it be necessary to consider further actions.

This EAL is intended to address the potential for a very rapid progression of events due to a dedicated attack. It is not intended to address incidents that are accidental or acts of civil disobedience, such as hunters or physical disputes between employees within the OCA. That initiating condition is adequately addressed by other EALs. Terrorist action identified above encompasses various acts including:

- air attack (airliner impacting the protected area)
- land-based attack (HOSTILE FORCE penetrating protected area)
- waterborne attack (HOSTILE FORCE on water penetrating protected area)
- BOMBS breaching the protected area

This EAL is intended to address the contingency for a very rapid progression of events due to an airborne terrorist attack such as that experienced on September 11, 2001, and the possibility for additional attacking aircraft. It is not intended to address accidental aircraft impact as that initiating condition is adequately addressed by other EALs. This EAL is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from additional attack elements. Although consequence analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and to activate in order to be better prepared to respond should protective actions become necessary. Federal agencies are expected to assist in the determination whether the aircraft impact was accidental or an attack. The Federal agency

maybe NORAD, FBI, FAA, or NRC. However, the declaration should not be unduly delayed awaiting Federal notification. Airliner is meant to be interpreted as the size of aircraft defined in the site-specific procedure developed for response to airborne threats.

This EAL addresses the immediacy of a threat to impact site vital areas within a relatively short time. The fact that the site is under serious attack with minimal time available for additional assistance to arrive requires ORO readiness and preparation for the implementation of protective measures.

Licensees should consider upgrading the classification to a General Emergency based on actual plant status after impact.

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**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

**GENERAL EMERGENCY**

**HG1 Security Event Resulting in Loss of Physical Control of the Facility.**

**OPERATING MODE APPLICABILITY:** All

**EXAMPLE EMERGENCY ACTION LEVEL:**

1. A HOSTILE FORCE has taken control of plant equipment such that plant personnel are unable to operate equipment required to maintain safety functions.

**BASIS:**

This IC encompasses conditions under which a HOSTILE FORCE has taken physical control of VITAL AREAs (containing vital equipment or controls of vital equipment) required to maintain safety functions and control of that equipment cannot be transferred to and operated from another location. Typically, these safety functions are reactivity control (ability to shut down the reactor and keep it shutdown), reactor water level (ability to cool the core), and decay heat removal (ability to maintain a heat sink) for a BWR. The equivalent functions for a PWR are reactivity control, RCS inventory, and secondary heat removal. If control of the plant equipment necessary to maintain safety functions can be transferred to another location, then the above initiating condition is not met.

This EAL should also address loss of physical control of spent fuel pool cooling systems if imminent fuel damage is likely (e.g., freshly offloaded reactor core in pool).

Loss of physical control of the control room or remote shutdown capability alone may not prevent the ability to maintain safety functions per se. Design of the remote shutdown capability and the location of the transfer switches should be taken into account.

**NEI 99-01 (Revised)**

Recognition Category H  
Hazards and Other Conditions Affecting Plant Safety

**INITIATING CONDITION MATRIX**

| <b>NOUE</b>  | <b>ALERT</b>  | <b>SITE AREA EMERGENCY</b>  | <b>GENERAL EMERGENCY</b>  |
|--|---|---|---|
| <b>HU1</b> Natural and Related Destructive Phenomena Affecting the PROTECTED AREA.<br><i>Op. Modes: All</i>                                  | <b>HA1</b> Natural and Related Destructive Phenomena Affecting the Plant VITAL AREA.<br><i>Op. Modes: All</i>   |   |   |
| <b>HU2</b> FIRE Within PROTECTED AREA Boundary Not Extinguished Within 15 Minutes of Detection.<br><i>Op. Modes: All</i>                     | <b>HA2</b> FIRE or EXPLOSION Affecting the Operability of Plant Safety Systems Required to Establish or Maintain Safe Shutdown.<br><i>Op. Modes: All</i>  |   |   |
| <b>HU3</b> Release of Toxic or Flammable Gases Deemed Detrimental to Safe Operation of the Plant.<br><i>Op. Modes: All</i>                   | <b>HA3</b> Release of Toxic or Flammable Gases Within or Contiguous to a VITAL AREA Which Jeopardizes Operation of Safety Systems Required to Establish or Maintain Safe Shutdown.<br><i>Op. Modes: All</i> |   |   |
| <b>HU4</b> Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant.<br><i>Op. Modes: All</i>    | <b>HA4</b> Confirmed Security Event in a Plant PROTECTED AREA.<br><i>Op. Modes: All</i>   | <b>HS1</b> Confirmed Security Event in a Plant VITAL AREA<br><i>Op. Modes: All</i>  | <b>HG1</b> Security Event Resulting in Loss of Physical Control of the Facility.<br><i>Op. Modes: All</i>   |
| <b>HU5</b> Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of a NOUE.<br><i>Op. Modes: All</i> | <b>HA6</b> Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of an Alert.<br><i>Op. Modes: All</i>  | <b>HS3</b> Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of Site Area Emergency.<br><i>Op. Modes: All</i> | <b>HG2</b> Other Conditions Existing Which in the Judgment of the Emergency Director Warrant Declaration of General Emergency.<br><i>Op. Modes: All</i> |
|  | <b>HA5</b> Control Room Evacuation Has Been Initiated.<br><i>Op. Modes: All</i>   | <b>HS2</b> Control Room Evacuation Has Been Initiated and Plant Control Cannot Be Established.<br><i>Op. Modes: All</i>                                   |   |
|  | <b>HA7</b> Notification of an Airborne Attack Threat<br><i>Op. Modes: All</i>   | <b>HS4</b> Site Attack<br><i>Op. Modes: All</i>   |   |
|  | <b>HA8</b> Notification of HOSTILE ACTION within the OCA<br><i>Op. Modes: All</i>   |   |   |

## **NEI 99-01 Guidance**

Modify the ECL definitions as provided in this attachment.

Add the definition for HOSTILE ACTION as provided in this attachment.

Delete existing EALS as follows:

1. HA4 EAL1 (INTRUSION into the PROTECTED AREA by a HOSTILE FORCE) because it is replaced by the new HOSTILE ACTION EAL HA8.
2. HS1 EAL1 (INTRUSION into the plant VITAL AREA by a HOSTILE FORCE) because it is replaced by the new HOSTILE ACTION EAL HS4.
3. E-HU2 (Confirmed security event with potential loss of level of safety of the ISFSI) because it is replaced by either HOSTILE ACTION EAL HA8 or Site Attack EAL HS4.

The following are the Security ICs/EALs for NEI 99-01 users. Detailed bases for each IC/EAL follow this summary. Verify that your EAL sets include the following Security-related EALS:

### **HU4 Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant.**

**Example EALS:** (1 or 2 or 3)

1. Security events as determined from (site-specific) Safeguards Contingency Plan and reported by the (site-specific) security shift supervision. (Existing NEI 99-01 HU4 EAL1)
2. A credible site-specific security threat notification. (2002 Security Order)
3. A validated notification from NRC providing information of an aircraft threat greater than 30 minutes away. (BL 2005-02)

### **HA4 Confirmed Security Event in a Plant PROTECTED AREA**

1. Other security events as determined from (site-specific) Safeguards Contingency Plan and reported by the (site-specific) security shift supervision. (Existing NEI 99-01 HA4 EAL2)

### **HA7 Notification of an Airborne Attack Threat**

1. A validated notification from NRC of an airliner attack threat less than 30 minutes away.

### **HA8 Notification of HOSTILE ACTION within the OCA**

1. A notification from the site security force that an armed attack, explosive attack, airliner impact or other HOSTILE ACTION is occurring or has occurred within the OCA. (BL 2005-02)

### **HS1 Confirmed Security Event in a Plant VITAL AREA**

1. Other security events as determined from (site-specific) Safeguards Contingency Plan and reported by the (site-specific) security shift supervision. (Existing NEI 99-01HS1 EAL2)

**HS4 Site Attack**

**Example EAL:**

1. A notification from the site security force of an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION is occurring or has occurred within the protected area. (BL 2005-02)

**HG1 Security Event Resulting in Loss Of Physical Control of the Facility.**

**Example EAL:**

1. A HOSTILE FORCE has taken control of plant equipment such that plant personnel are unable to operate equipment required to maintain safety functions. (Existing NEI 99-01 HG1 EAL1)

**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

HU4

**Initiating Condition – NOTIFICATION OF UNUSUAL EVENT**

**Confirmed Security Event Which Indicates a Potential Degradation in the Level of Safety of the Plant.**

**Operating Mode Applicability:** All

**Example Emergency Action Levels:** (1 or 2 or 3)

1. Security events as determined from (site-specific) Safeguards Contingency Plan and reported by the (site-specific) security shift supervision.
2. A credible site-specific security threat notification.
3. A validated notification from NRC providing information on an aircraft threat greater than 30 minutes away.

**Basis:**

Reference is made to (site-specific) security shift supervision because these individuals are the designated personnel on-site qualified and trained to confirm that a security event is occurring or has occurred. Training on security event classification confirmation is closely controlled due to the strict secrecy controls placed on the plant Safeguards Contingency Plan.

This EAL 1 is based on (site-specific) Site Security Plans. Security events which do not represent a potential degradation in the level of safety of the plant are reported under 10 CFR 73.71 or in some cases under 10 CFR 50.72. Examples of security events that indicate potential degradation in the level of safety of the plant are provided below for consideration.

Consideration should be given to the following types of events when evaluating an event against the criteria of the site-specific Security Contingency Plan: CIVIL DISTURBANCE and STRIKE ACTION.

The intent of EAL 2 is to ensure that appropriate notifications for the security threat are made in a timely manner. This includes information of a credible threat. Only the plant to which the specific threat is made need declare the Notification of an Unusual Event.

The intent of EAL 3 is to ensure that notifications for the security threat are made in a timely manner and that Offsite Response Organizations and plant personnel are at a state of heightened awareness regarding the credible threat. Only the plant to which the specific threat is made need declare the Notification of Unusual Event. This EAL is met when a plant receives information regarding an aircraft threat from NRC and the aircraft is more than 30 minutes away from the plant. It is not the intent of this EAL to replace existing non-terrorist related EALs involving aircraft.

The determination of “credible” is made through use of information found in the (site-specific) Safeguards Contingency Plan.

A higher initial classification could be made based upon the nature and timing of the threat and potential consequences. The licensee shall consider upgrading the emergency response status and emergency classification in accordance with the (site-security-specific) Safeguards Contingency Plan and Emergency Plans.



**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

HA4

**Initiating Condition -- ALERT**

**Confirmed Security Event in a Plant PROTECTED AREA.**

**Operating Mode Applicability:** All

**Example Emergency Action Level:**

1. Other security events as determined from (site-specific) Safeguards Contingency Plan and reported by the (site-specific) security shift supervision.

**Basis:**

This class of security events represents an escalated threat to plant safety above that contained in the NOUE.

The Safeguards Contingency Plan identifies numerous events/conditions that constitute a threat/compromise to a Station's security. Only those events that involve actual or potential substantial degradation to the level of safety of the plant need to be considered. The following events would not normally meet this requirement; (e.g., failure by a member of the Security Force to carry out an assigned/required duty, internal disturbances, loss/compromise of safeguards materials, or strike actions).

The intent of this EAL is to ensure that notifications for the security threat are made in a timely manner and that Offsite Response Organizations and plant personnel are at a state of heightened awareness regarding the credible threat. Only the plant to which the specific threat is made need declare the Alert. This EAL is met when a plant receives information regarding an airliner attack threat from NRC and the airliner is less than 30 minutes away from the plant.

This EAL is intended to address the contingency of a very rapid progression of events due to an airborne terrorist attack such as that experienced on September 11, 2001. This EAL is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from such an attack. Although consequence analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and encouraged to activate (if they do not normally) to be better prepared should it be necessary to consider further actions. Airliner is meant to be interpreted as the size of aircraft defined in the site-specific procedure developed for response to airborne threats. The status of the plane is provided by NORAD through the NRC.

The determination of "credible" is made through use of information found in the (site-specific) Safeguards Contingency Plan.

Reference is made to (site-specific) security shift supervision because these individuals are the

designated personnel on-site qualified and trained to confirm that a security event is occurring or has occurred. Training on security event classification confirmation is closely controlled due to the strict secrecy controls placed on the plant Security Plan.

**HAZARDS AND OTHER CONDITIONS  
AFFECTING PLANT SAFETY**

HA7

**Initiating Condition -- ALERT**

**Notification of an Airborne Attack Threat.**

**Operating Mode Applicability:** All

**Example Emergency Action Level:**

1. A validated notification from NRC of an airliner attack threat less than 30 minutes away.

**Basis:**

The intent of this EAL is to ensure that notifications for the security threat are made in a timely manner and that Offsite Response Organizations and plant personnel are at a state of heightened awareness regarding the credible threat. Only the plant to which the specific threat is made need declare the Alert. This EAL is met when a plant receives information regarding an airliner attack threat from NRC and the airliner is less than 30 minutes away from the plant.

This EAL is intended to address the contingency of a very rapid progression of events due to an airborne terrorist attack such as that experienced on September 11, 2001. This EAL is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from such an attack. Although consequence analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and encouraged to activate (if they do not normally) to be better prepared should it be necessary to consider further actions. Airliner is meant to be interpreted as the size of aircraft defined in the site-specific procedure developed for response to airborne threats. The status of the plane is provided by NORAD through the NRC.

**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

HA8

**Initiating Condition -- ALERT**

**Notification of HOSTILE ACTION within the OCA.**

**Operating Mode Applicability:** All

**Example Emergency Action Level:**

1. A notification from the site security force that an armed attack, explosive attack, airliner impact or other HOSTILE ACTION is occurring or has occurred within the OCA.

**Basis:**

This EAL is intended to address the potential for a very rapid progression of events due to a terrorist attack, including:

- air attack (airliner impacting the OCA)
- land-based attack (hostile force progressing across licensee property or directing projectiles at the site)
- waterborne attack (hostile force on water attempting forced entry, or directing projectiles at the site)
- BOMBS

This EAL is not intended to address incidents that are accidental or acts of civil disobedience, such as hunters or physical disputes between employees within the OCA or PA. That initiating condition is adequately addressed by other EALs.

This EAL is not premised solely on adverse health effects caused by a radiological release. Rather the issue is the immediate need for assistance due to the nature of the event and the potential for significant and indeterminate damage. Although NPP security officers are well trained and prepared to protect against HOSTILE ACTION, it is appropriate for Offsite Response Organizations to be notified and encouraged to begin activation (if they do not normally) to be better prepared should it be necessary to consider further actions.

This EAL is intended to address the contingency for a very rapid progression of events due to an airborne terrorist attack such as that experienced on September 11, 2001, and the possibility for additional attacking aircraft. It is not intended to address accidental aircraft impact as that initiating condition is adequately addressed by other EALs. This EAL is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from additional attack elements. Although consequence analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and to activate in order to be better prepared to respond should

protective actions become necessary. Federal agencies are expected to assist in the determination whether the aircraft impact was accidental or an attack. The Federal agency maybe NORAD, FBI, FAA, or NRC. However, the declaration should not be unduly delayed pending Federal notification. Airliner is meant to be interpreted as the size of aircraft defined in the site-specific procedure developed for response to airborne threats.

This IC/EAL addresses the immediacy of an expected threat arrival or impact on the site within a relatively short time. The fact that the site is an identified attack candidate with minimal time available for further preparation requires a heightened state of readiness and implementation of protective measures that can be effective (onsite evacuation, dispersal or sheltering) before arrival or impact.

**HAZARDS AND OTHER CONDITIONS  
AFFECTING PLANT SAFETY**

HS1

**Initiating Condition – SITE AREA EMERGENCY**

**Confirmed Security Event in a Plant VITAL AREA.**

**Operating Mode Applicability:** All

**Example Emergency Action Level:**

1. Other security events as determined from (site-specific) Safeguards Contingency Plan and reported by the (site-specific) security shift supervision.

**Basis:**

This class of security events represents an escalated threat to plant safety above that contained in the Alert IC.

The Safeguards Contingency Plan identifies numerous events/conditions that constitute a threat/compromise to a station's security. Only those events that involve Actual or Likely Major failures of plant functions needed for protection of the public need to be considered. The following events would not normally meet this requirement; (e.g., failure by a member of the Security Force to carry out an assigned/required duty, internal disturbances, loss/compromise of safeguards materials, or strike actions).

Reference is made to (site-specific) security shift supervision because these individuals are the designated personnel on-site qualified and trained to confirm that a security event is occurring or has occurred. Training on security event classification confirmation is closely controlled due to the strict secrecy controls placed on the plant Security Plan.

Loss of Plant Control would escalate this event to a GENERAL EMERGENCY.

**HAZARDS AND OTHER CONDITIONS  
AFFECTING PLANT SAFETY**

HS4

**Initiating Condition – SITE AREA EMERGENCY**

**Site Attack.**

**Operating Mode Applicability:** All

**Example Emergency Action Level:**

1. A notification from the site security force that an armed attack, explosive attack, airliner impact, or other HOSTILE ACTION is occurring or has occurred within the PROTECTED AREA.

**Basis:**

This class of security events represents an escalated threat to plant safety above that contained in the Alert IC in that a hostile force has progressed from the Owner Controlled Area to the Protected Area.

Although NPP security officers are well trained and prepared to protect against HOSTILE ACTION, it is appropriate for Offsite Response Organizations to be notified and encouraged to begin preparations for public protective actions (if they do not normally) to be better prepared should it be necessary to consider further actions.

This EAL is intended to address the potential for a very rapid progression of events due to a dedicated attack. It is not intended to address incidents that are accidental or acts of civil disobedience, such as hunters or physical disputes between employees within the OCA or PA. That initiating condition is adequately addressed by other EALs. Terrorist action identified above encompasses various acts including:

- air attack (airliner impacting the protected area)
- land-based attack (hostile force penetrating protected area)
- waterborne attack (hostile force on water penetrating protected area)
- BOMBS breaching the protected area

This EAL is intended to address the contingency for a very rapid progression of events due to an airborne terrorist attack such as that experienced on September 11, 2001, and the possibility for additional attacking aircraft. It is not intended to address accidental aircraft impact as that initiating condition is adequately addressed by other EALs. This EAL is not premised solely on the potential for a radiological release. Rather the issue includes the need for assistance due to the possibility for significant and indeterminate damage from additional attack elements. Although consequence analyses show NPPs to be robust, it is appropriate for Offsite Response Organizations to be notified and to activate in order to be better prepared to respond should protective actions become necessary. Federal agencies are expected to assist in the

determination whether the aircraft impact was accidental or an attack. The Federal agency maybe NORAD, FBI, FAA, or NRC. However, the declaration should not be unduly delayed awaiting Federal notification. Airliner is meant to be interpreted as the size of aircraft defined in the site-specific procedure developed for response to airborne threats.

This EAL addresses the immediacy of a threat to impact site vital areas within a relatively short time. The fact that the site is under serious attack with minimal time available for additional assistance to arrive requires ORO readiness and preparation for the implementation of protective measures.

Licensees should consider upgrading the classification to a General Emergency based on actual plant status after impact.



**HAZARDS AND OTHER CONDITIONS**  
**AFFECTING PLANT SAFETY**

HG1

**Initiating Condition – GENERAL EMERGENCY**

**Security Event Resulting in Loss of Physical Control of the Facility.**

**Operating Mode Applicability:** All

**Example Emergency Action Level:**

1. A HOSTILE FORCE has taken control of plant equipment such that plant personnel are unable to operate equipment required to maintain safety functions.

**Basis:**

This IC encompasses conditions under which a HOSTILE FORCE has taken physical control of VITAL AREAs (containing vital equipment or controls of vital equipment) required to maintain safety functions and control of that equipment cannot be transferred to and operated from another location. Typically, these safety functions are reactivity control (ability to shut down the reactor and keep it shutdown), reactor water level (ability to cool the core), and decay heat removal (ability to maintain a heat sink) for a BWR. The equivalent functions for a PWR are reactivity control, RCS inventory, and secondary heat removal. If control of the plant equipment necessary to maintain safety functions can be transferred to another location, then the above initiating condition is not met.

This EAL should also address loss of physical control of spent fuel pool cooling systems if imminent fuel damage is likely (e.g., freshly an offloaded reactor core in pool).

Loss of physical control of the control room or remote shutdown capability alone may not prevent the ability to maintain safety functions per se. Design of the remote shutdown capability and the location of the transfer switches should be taken into account.

### **Examples of Acceptable Changes to NRC Notifications**

Notification to the NRC is important during a security event. The current notification to the NRC for safeguards events is required under 10 CFR 73.71. The regulation states: "Each licensee subject to the provisions of §§ 73.20, 73.37, 73.50, 73.51, 73.55, 73.60, or 73.67 shall notify the NRC Operations Center within 1 hour of discovery of the safeguards events described in paragraph I(a)(1) of appendix G to this part...." Additionally, safeguards events that warrant declaration under the site's emergency plan must be reported to the NRC in accordance with 10 CFR 50.72. As stated in 10 CFR 50.72(a)(3), "The licensee shall notify the NRC immediately after notification of the appropriate State or local agencies and not later than one hour after the time the licensee declares one of the Emergency Classes." In the post-9/11 environment, where coordinated attacks on multiple facilities are a possibility, faster notification of the NRC would allow the NRC to more quickly warn other licensees and notify other Federal agencies. Licensees should consider changing their notification procedures to ensure the NRC is notified of safeguards events immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat. For a safeguards event that presents an imminent threat to the facility (e.g., an event that requires initiation of a security response consistent with a licensee's physical safeguards plan for defending against an attack by a hostile force), the staff wants licensees to notify the NRC immediately after notifying the appropriate LLEAs. This means that immediately after or concurrent with the notification to LLEAs in accordance with 10 CFR 73.55 by the licensee's security organization, the NRC Operations Center should be notified, if possible, using the emergency notification system (ENS).

The information in this attachment should not be misconstrued to imply that immediate notifications to local law enforcement will be affected by the prompt NRC notification. In addition, the NRC required notification to State and local governmental agencies within 15 minutes after declaring an emergency will not be changed by any information in this bulletin.

The voluntary modification to the licensee's notification process is derived from the requirement of 10 CFR 73.71 to notify the NRC within 1 hour after the discovery of an imminent or actual threat against the facility. This notification is requested to occur within about 15 minutes of discovery. Tying the notification to event discovery, rather than to the declaration of an emergency class, prevents a delay in notification due to event assessment for an emergency class declaration.

It is understood that for declared emergencies many licensees currently await the arrival of augmenting staff to support follow-up NRC information requests. The purpose of this notification will allow the NRC to warn other licensees and initiate Federal response in accordance with the National Response Plan. In support of this notification process, the NRC Operations Center will not request an "open communication line." Additionally, the questions will be limited to information needed to understand which facility is involved and the nature of the event. If the licensee has classified the event before this notification, then the initial notification to the NRC per 10 CFR 50.72(a)(1)(i) will be considered met by the accelerated notification. Licensees are expected to provide additional information to the NRC during such an event in accordance with the reporting requirements of 10 CFR 50.72(c).

Licensees should consider making the following changes in the notification process:

- licensee control room staff should notify the NRC using the ENS line after being informed by the station security staff of any security-based event(s) considered to be an imminent (actual) threat,
- an accelerated verbal notification, without hard copy, to the NRC with the following information:
  - site name
  - emergency classification, if determined
  - nature of the threat (briefly described, if known)
    - ▶ type of attack (e.g., armed assault by land, water, or aircraft)
    - ▶ attack status (i.e., imminent, in progress, or repelled)
- The accelerated notification should not be delayed to continue assessment of the event. Upon completion of (or concurrent with) the accelerated notification, the event should be assessed for applicability of the site-specific emergency plan emergency action levels. If appropriate, the event should be classified and the emergency plan implemented. Appropriate notifications should be made to State and local emergency management authorities, followed by the notification to the NRC in accordance with 10 CFR 50.72.

NOTE: Notwithstanding the above guidance, the NRC's existing philosophy that the licensee's first responsibility during a transient is to stabilize the plant and keep it safe. This includes the physical security response during an imminent threat situation as well. The notification process should not be allowed to interfere with plant safety or physical security response. Licensees are expected to maintain adequate staffing to fulfill these responsibilities and complete the notification actions with reasonable timeliness consistent with the threat posed.

An example of a sequence of events is presented below:

| Step | Event or Action  |
|------|--|
| 1    | A security-based event considered to be an imminent threat to the security of the facility occurs or is discovered.          |
| 2    | Security supervisor directs notification of State and local law enforcement organizations so they can respond to the threat. |
| 3    | Security notifies the control room of the occurrence.  |
| 4    | The control room shift supervisor is informed of the occurrence.   |

|   |  |
|---|--|
| 5 | The shift supervisor directs notification of the NRC Operations Center, via ENS, to make the accelerated notification. |
| 6 | The shift supervisor assesses the event for emergency declaration purposes.  |
| 7 | The shift supervisor declares the emergency and starts implementing the emergency plan.                                |
| 8 | The shift supervisor directs notification to State and local authorities of event declaration.                         |
| 9 | The licensee staff initiates follow-up notification to NRC Operations Center.  |

The examples presented above are for illustrative purposes only. These examples are not intended to describe the exact or only sequence, rather they describe a preferred process of immediacy with regard to the "accelerated notification" when addressing security-based events followed by implementation of the site's emergency plan. It is possible that the emergency classification and notification to offsite government officials will occur with or as the initial notification for assistance of local law enforcement. Notification of the NRC should occur immediately following notification of offsite officials and may be performed in an accelerated manner.

## **Examples of Acceptable Changes to Onsite Protective Measures**

An Alert or Site Area Emergency declaration is generally accompanied by site assembly, accountability measures, site evacuation, activation of emergency response facilities (ERFs), and other actions. Although these actions are appropriate for some emergencies, other actions may be more appropriate for a terrorist attack, particularly an aircraft attack. Many licensees have made protective measure changes in response to the compensating measures imposed by the order of February 25, 2002, by modifying page announcements and emergency response organization augmentation instructions.

Licensees should consider the following measures as part of a range of protective measures for site workers and apply them as appropriate, although they may not be suitable in all circumstances:

- evacuation of personnel from target buildings (including security personnel)
- site evacuation by opening (while continuing to defend) security gates
- dispersal of licensed operators
- sheltering of personnel in structures away from potential site targets
- arrangements for accounting for personnel after the attack

It is expected that site-specific arrangements, such as the location of workers in relation to potential targets, will dictate the appropriateness of sheltering versus evacuation. It should be noted that sheltering inside target buildings may not provide the intended personnel protection. Procedures should be modified to ensure that plant page announcements accomplish the onsite protective measures deemed appropriate.

Licensees should consider developing an onsite protective measure decision making tool to help the shift supervisor. This tool is intended to aid the rapid decision for site evacuation via a normal exit, site evacuation by opening gates, or if little time is available, locations for sheltering and buildings to be evacuated. In any case, it may be appropriate to evacuate target buildings, as quickly as possible. The tool should consider the time needed versus time available to take action for the onsite population during:

- normal working hours
- off-normal hours
- weekends
- outages
- adverse weather

## **Examples of Acceptable Changes to Emergency Response Organization Augmentation**

The February 25, 2002 order to licensees, required that licensees staff emergency response facilities and identify alternative facilities to support emergency operations facility activities. Licensees have been inspected for compliance with this order and variations in the identification and staffing of emergency response facilities were found. Some licensees do not activate elements of the emergency response organization until the site is secured. Security-based events warrant the activation of the emergency response organization, including operations and engineering support, corrective action and repair functions, medical and first aid response, and health physics support, monitoring and assessments. It is also prudent to activate the onsite members of the emergency response organization and deploy them to an alternative facility near the site if there is time to safely relocate personnel. This includes the technical support center staff, operations support center staff, and any other personnel assigned to onsite positions. The emergency response organization is expected to be staged in a manner that supports rapid response to mitigate site damage as soon as the site is secured. It is appropriate for such alternative facilities to have general plant drawings and procedures, phones, and (ideally) computer links to the site. However, alternative facilities are not required to reproduce the full documentation present at primary emergency response facilities. Training centers, emergency operations centers, and enclosed assembly areas are adequate alternative facilities. The characteristics of alternative facilities include:

- accessibility even if the site is under threat or attack
- communication links with the emergency operations facility, control room, and security
- capability to notify offsite response organizations if the emergency operations facility is not performing this action
- capability for engineering and damage control teams to begin planning mitigative actions (e.g., general drawings and system information)

Many sites use the emergency operations facility as the alternative facility for onsite emergency response organization members. This is acceptable when the emergency operations facility is outside the owner-controlled area and not far from the site. It is appropriate to identify an alternative facility near the site if the emergency operations facility is more than about 30 miles away. In cases where emergency operations facilities are located within the vehicle checkpoint, it is appropriate to develop an alternative facility for emergency response functions if the emergency operations facility is not accessible.

## **Examples of Acceptable Changes to Security Related Drill and Exercise Program**

### **Purpose:**

To describe the plan for a terrorist-event-based integrated response drill and exercise program for nuclear power plants.

### **Background:**

The likelihood for a security-based event at a nuclear power plant which causes damage to safety-related equipment is low. However, emergency response organizations should be prepared to respond if such damage occurs. Assessments indicate that licensee measures are available to limit or mitigate the effects of security-based events. Consequently, such events would not create an accident that causes a larger release or one that occurs more quickly than the accidents already addressed by the emergency preparedness planning basis. However, security-based events pose aspects that are different from the usual conditions traditionally practiced in EP drill and exercise programs. The emergency response organization is the primary organization trained to effectively mitigate damage caused by an event. As such, the NRC believes that the emergency response organization should practice response to security-based events.

NUREG-0654, Part II, and NUREG-0737, Supplement 1 refers to schedules for testing major elements of emergency plans by licensees over a 6-year period. The NRC, per Inspection Procedure 82302, periodically reviews these major elements. The elements include activities applicable to security-based scenarios, such as accident detection and assessment, emergency classification, notification of onsite and offsite emergency responders, protective action recommendations, use of security personnel to provide prompt access for emergency equipment and support, evacuation of emergency response facilities and relocation to backup facilities, assembly and accountability, and use of fire control teams, first aid/rescue teams, and medical support personnel. In light of the post-9/11 potential for security-based licensee events, it is the staff's expectation that security-based EP activities will be demonstrated as major elements of the licensee's emergency plan within the frequency committed to by the licensee.

EP drill and exercise programs should be used to maintain the key skills necessary for mitigating security-based events. Licensees should expect to conduct a NRC-observed off-year drill within 3 years of the completion of a pilot exercise program being developed by NRC. Following performance of the NRC-observed security-based drill or exercise, licensees would be expected to demonstrate security-based EP program activities under the major element schedule as committed to in their emergency plans.

### **Program Summary:**

The NEI Emergency Preparedness and Security Working Group worked with the staff to establish guidelines for integration and demonstration of emergency responses to terrorist events, including preparation and conduct of integrated drills exercising Emergency Response Organizations' response to a range of terrorist events. The task force's target date for developing draft guidelines by the end of 2005, followed by industry tabletop drills and 4-6 pilot demonstrations within 9-12 months. Lessons learned from these drills will be used to improve guidelines for industry use, and for internal site reviews, training, and future drills. Over the following 3 years, it is expected that each

site will initiate an integrated drill during the off-year. The long-term expectations are that each site will demonstrate an emergency response to a terrorist event at least once during the 6-year exercise cycle.

Integrated Response Drill and Exercise Program Structure:

1. Industry-wide Structure as a Phased approach:
  - a. Phase I
    - i. Formulate NEI EP Security Task Force:
      - (1) Develop industry guidelines
      - (2) Develop scenario abstracts
      - (3) Identify an industry peer review team
      - (4) Develop a table top protocol
    - ii. Coordinate a pilot program (2005-2006) for tabletop exercises.
    - iii. Drill 4-6 sites within the first year. In addition, 1-2 biennial exercises industry-wide will also include a terrorist-event-based scenario during the pilot program which may include NRC participation.
    - iv. Validate industry guidelines.
    - v. Consider FEMA evaluation criteria.
    - vi. Develop lessons learned.
    - vii. Coordinate an NRC NEI workshop.
  - b. Phase 2
    - i. Complete drills at all sites within 3 years of completion of the pilot.
    - ii. NRC participation in 1-2 biennial exercises/year.
  - c. Phase 3
    - i. Once all sites have completed their initial drill, incorporate terrorist-event-based scenarios into the 6-year exercise plan.
2. Conduct of activities
  - a. Tabletop
    - i. Tabletops are facilitated activities intended to identify, establish and clarify roles and responsibilities among the various stakeholders and organizations needing to respond to an event at a particular NPP. These activities are intended to gain knowledge and develop rapport in order to effectively respond to events. Participants are expected to include licensee, State, and local emergency management as a minimum. Additional participants such as fire or medical responders, local law enforcement agencies, and Federal responders are encouraged to participate in order to enhance the learning experience. These activities are facilitated by the licensee.
  - b. Pilot Program
    - i. 4-6 onsite drills with limited participation of offsite responders within the option of the ORO.
    - ii. Offsite roles/response can be provided by the control cell based on lessons learned from licensee(s)' tabletop exercises.



- iii. NRC will observe without regulatory oversight (no enforcement), however, standard post-drill critique requirements will be followed.
  - iv. Drills will be conducted in the off-year for the pilot. During the pilot period, a plant or plants conducting the biennial exercise are expected to use a terrorist-based scenario.
  - v. Pilot plants should be selected and considered based in part on risk-informed criteria.
  - vi. A series of scenarios should be developed to exercise various aspects of threats since the threats may require different consequence management actions.
- c. Full Implementation - After Pilot
- i. All plants will conduct a terrorist-based scenario within approximately 3 years.
  - ii. Following the NRC inspected plant demonstration, the licensee will include terrorist-based scenarios in the Drill and Exercise program. These scenarios will be incorporated into the 6-year exercise plan.
  - iii. A full-participation terrorist-based exercise to be conducted by some plant(s) on an annual basis (1-2 exercises each year).
  - iv. Full implementation will include engagement of offsite responders and FEMA.
- d. Scenarios focused on EP response
- i. The scenario should address EP response actions early in the event, including initial classification, notification, PARs if appropriate, and onsite protective measures. Licensees can use "time-jump" or other techniques to pass through the security event, then pick up the EP response actions based on damage to the site or facility.
  - ii. Various scenarios should be developed to address response to various different threat modes, initiators, or response capabilities such as onsite facilities available/not available or alternative accountability processes.
  - iii. The differences in response actions (deltas) need to be determined for terrorist events vs. non-terrorist events.

Following the pilot program, the staff will report the results to the Commission and support industry workshops to address lessons learned.

### **Scenario Content for Drills**

The purpose of the proposed terrorist-event-based drill is to maintain key skills, specifically the site-specific team skills necessary to mitigate security-based events. Important aspects of such a response should be simulated in drills and ERO proficiency in the terrorist-initiated event environment should be practiced and improved.

Despite the low likelihood of security-based events that cause damage to safety-related equipment and result in core damage, the staff expects the following elements to be addressed by scenarios used in the drill program:

- Scenarios that require mitigation of reactor damage under the simulated conditions after a terrorist attack.

- Scenarios should be success oriented (i.e., the ERO may succeed in preventing core damage and/or a radiological release if the proper actions are taken).
- Information that provides simulated conditions in the aftermath of the attack, (e.g., simulate site conditions, casualties, loss of equipment, and loss of indication).
- Scenarios that require response to both armed attack (e.g., damage from fires, explosions, and bullets) and aircraft impact scenarios (e.g., large fire area, civil structure damage, rubble areas) in the drill program.
- Scenarios that include core damage and a release with the ERO planning and executing mitigative actions.
- The ERO diagnoses plant status, plans mitigation actions, executes mitigative actions (with a reasonable level of component and repair simulation), and navigates plant recovery
- The scenarios should focus the ERO on prevention and mitigation of core damage and/or maintenance of containment integrity where core damage is assumed to occur.
  - There is simulation of interfaces that may be expected as a result of the terrorist event such as:
    - coordination of site access with LLEA
    - use of alternative facilities
    - use of abbreviated notifications to OROs for rapidly evolving events
    - notification of OROs and/or from alternative locations
    - site conditions that may prevent normal access and transit due to fire, locked doors, security measures, and areas of the site that have not yet been secured
    - protecting a minimum contingent of operations and maintenance personnel for recovery
    - dealing with significant numbers of personnel casualties
    - hostile attempts to interfere with radio communication may still exist

Some of these elements are more amenable to “out of sequence” drilling than to incorporation into a large scale drill, especially in the early phases of a pilot program. All aspects need not be combined in a single drill, but should be addressed by the pilot program and eventually by the licensee’s drill and exercise program.

The events that cause the conditions are secondary and need only to be explained insofar as necessary for meaningful ERO response. There is no intention to simulate the defeat of the site security force. Rather, the scenario is akin to scenarios used in the past which postulate the failure of multiple safety systems, but with aspects associated with a terrorist event.

Scenarios should never clearly identify target sets in order to prevent access to information that could be useful to individuals who intend to perform a hostile act. Simulated equipment out of service and damage exceeding any single target set should be used. Due to the potential information value, licensee organizations should keep scenarios as “not publicly available” in accordance with 10 CFR 2.390, although summaries without detailed component information may be released. Sharing experiences and insights with other emergency responders is expected. However, some level of discretion is appropriate when considering sharing with a wider audience if sharing could provide sensitive information.