

## NRR-PMDAPEm Resource

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**From:** Feintuch, Karl  
**Sent:** Friday, October 05, 2012 3:12 PM  
**To:** 'Alan I Hassoun/Employees/dteenergy'  
**Cc:** Crockett, Jack; Beltz, Terry; Costa, Richard; Chawla, Mahesh  
**Subject:** FW: Teleconference to Discuss RAI on Fermi 2 Physical Security Plan, Revision 14 (Oct 5 10:00 AM EDT) - PM Feintuch comments; Costa clarifying information  
**Attachments:** Fermi RAI update.docx; Clarifying information for Fermi 2 Nuclear Power Plant RAI.docx

Simultaneously (to the minute) of my message of October 5.2012, 2:55 PM ET, I received clarifying information intended for you, as discussed during the conference call. The clarifying information pertains to questions 4 and 5, as shown in the second attachment.

Coordination next week will be by PM Terry Beltz, who may be reached at 301-415-3049

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**From:** Feintuch, Karl  
**Sent:** Friday, October 05, 2012 2:55 PM  
**To:** 'Alan I Hassoun/Employees/dteenergy'  
**Cc:** Beltz, Terry  
**Subject:** Teleconference to Discuss RAI on Fermi 2 Physical Security Plan, Revision 14 (Oct 5 10:00 AM EDT) - PM Feintuch comments

Attached are my notes on the conference call. Please provide your list of attendees, Cc Terry Beltz. (You may have already done so, I have had some problems today with Outlook.)

Karl Feintuch  
USNRC  
301-415-3079

**Hearing Identifier:** NRR\_PMDA  
**Email Number:** 501

**Mail Envelope Properties** (Karl.Feintuch@nrc.gov20121005151100)

**Subject:** FW: Teleconference to Discuss RAI on Fermi 2 Physical Security Plan, Revision 14 (Oct 5 10:00 AM EDT) - PM Feintuch comments; Costa clarifying information  
**Sent Date:** 10/5/2012 3:11:34 PM  
**Received Date:** 10/5/2012 3:11:00 PM  
**From:** Feintuch, Karl

**Created By:** Karl.Feintuch@nrc.gov

**Recipients:**

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Tracking Status: None

**Post Office:**

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	853	10/5/2012 3:11:00 PM
Fermi RAI update.docx	24403	
Clarifying information for Fermi 2 Nuclear Power Plant RAI.docx		34477

**Options**

**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

===== update 2012-10-05-1415 ET =====

NRC HQ Attendance: Karl Feintuch (for PM Terry Beltz); Richard ("Rick") Costa; Jack Crockett

Alan Hassoun ([hassouna@dteenergy.com](mailto:hassouna@dteenergy.com)) will provide list of licensee participants.

Meeting started on time. Points of clarification were discussed. Further coordination next week will be with PM Beltz. The expectation for changes to the plan would be for their inclusion in the next revision the Physical Security Plan.

The meeting was conducted from the RAI document supplied by Rick Costa. A [typo] corrected version of the formatted RAI text (below) is included for completeness.

===== RAI items follow =====

#### **A. Conference call bridge line information**

Please call 877.939.3873 and enter Participant Code 8637943# to be connected to the teleconference.

#### **B. Sensitivity considerations**

No safeguards information will be discussed on this call.

#### **C. Background to the Request for Information (RAI)**

By letter dated August 1, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12219A359), Detroit Edison Company, (the licensee) submitted the Fermi Nuclear Power Plant's Physical Security Plan (PSP), Training and Qualification Plan, and Safeguards Contingency Plan, Revision 14. The enclosure to the letter contained Safeguards Information and has been withheld from public disclosure.

The U.S. Nuclear Regulatory Commission staff is currently reviewing the submittal to ensure compliance with Title 10 of the Code of Federal Regulations (10 CFR), Section 50.54(p)(2). The NRC staff has determined that the additional information requested below is needed to complete its review.

#### **D. Schedule for Response**

Please provide your response within 30 days of the receipt of this request. Also, let us know if you would like to discuss this with the NRC staff.

#### **E. Requested Items**

**RAI-1.** In section 4.1 of the PSP, the security organization is described. In the second full paragraph on page 4 and throughout the security plans, the term "team" is replaced with "force." This change was not described in the Revision Summary that was provided with the revision. Provide the rationale for this change.

### **Regulatory Basis for RAI-1:**

Consistent with 10 CFR 50.54(p)(2), the licensee may make changes to the plans referenced in paragraph (p)(1) of this sections, without prior Commission approval if the changes do not decrease the safeguards effectiveness of the plan. The licensee shall maintain records of changes to the plans made without prior Commission approval for a period of 3 years from the date of the change, and shall submit, as specified in §50.4 or §52.3 of this chapter, a report containing a description of each change within 2 months after the change is made.

**RAI-2.** Section 11.3 of the PSP describes protected area (PA) barriers at the site. On pages 10-12 of Revision 13 of the PSP, there was a list of items associated with the PA barrier. This list is not found in Revision 14. While the Revision Summary lists this change, it provides no rationale for the change. Provide the rationale for this change and how this change was evaluated to ensure it complies with 50.54(p)(2).

### **Regulatory Basis for RAI-2:**

Consistent with 10 CFR 50.54(p)(2), the licensee may make changes to the plans referenced in paragraph (p)(1) of this sections, without prior Commission approval if the changes do not decrease the safeguards effectiveness of the plan. The licensee shall maintain records of changes to the plans made without prior Commission approval for a period of 3 years from the date of the change, and shall submit, as specified in §50.4 or §52.3 of this chapter, a report containing a description of each change within 2 months after the change is made.

**RAI-3.** Section 14.4.4 of the PSP describes vehicle searches at the protected area. The language in this section was changed to account for Security Frequently Asked Question (SFAQ) 12-06. However, the language in the PSP does not include the acceptable methodology described in the resolution to SFAQ 12-06 to maintain integrity of the search for the armed security officer. Describe the specific proceduralized security measures (as specified in section 14.4.4 of the PSP) used to maintain the integrity of the search performed on armed security officers and how this process meets the requirements of 10 CFR 73.55(h)(3)(i). Additionally, appropriate changes should be made during the next revision of the site's security plans to ensure the language clearly and fully describes the search process for armed security officers at the protected area.

### **Regulatory Basis for RAI-3:**

Consistent with 10 CFR 73.55(c )(1), licensee security plans must describe: (i) how the licensee will implement requirements of this section through the establishment and maintenance of a security organization, the use of security equipment and technology, the training and qualification of security personnel, the implementation of predetermined response plans and strategies, and the protection of digital computer and communication system and networks.

Consistent with 10 CFR 73.55(h)(3), protected area searches, licensees shall search all personnel, vehicles and materials requesting access to protected areas, (i), the search for firearms, explosives, incendiary devices, or other items which could be used to commit radiological sabotage shall be accomplished through the use of equipment capable of detecting these items, or through visual and physical searches, or both, to ensure that all items are clearly identified before granting access to protected areas. The licensee shall subject all persons except official Federal, state, and local law enforcement personnel on official duty to these searches upon entry to the protected area. Armed security officers who are on duty and have exited the protected area may re-enter the protected area without being searched for firearms.

**RAI-4.** Section 15.1 of the PSP describes illumination at the site. Describe how the technology being used to augment site lighting for the assessment of the PA perimeter in no-light or low-light conditions meets the requirements of 10 CFR 73.55(e)(7)(i)(c), 73.55(i)(2), and 73.55(i)(3)(vii). See SFAQ 10-15. Additionally, appropriate changes should be made during the next revision of the site's security plans to ensure the language clearly describes how the technology used to augment site illumination for the assessment of the PA perimeter in no-light or low light conditions meets the requirements specified above.

**Regulatory Basis for RAI-4:**

Consistent with 10 CFR 73.55(c)(1), licensee security plans must describe: (i) how the licensee will implement requirements of this section through the establishment and maintenance of a security organization, the use of security equipment and technology, the training and qualification of security personnel, the implementation of predetermined response plans and strategies, and the protection of digital computer and communication system and networks.

Consistent with 10 CFR 73.55(e)(7), isolation zone. (i), an isolation zone must be maintained in outdoor areas adjacent to the protected area barrier. The isolation zone shall be: (c) monitored with assessment equipment designed to satisfy the requirements of § 73.55(i) and provide real-time and play-back/recorded video images of the detected activities before and after each alarm annunciation.

Consistent with 10 CFR 73.55(i)(2), intrusion detection equipment must annunciate and video assessment equipment must display concurrently, in at least two continuously staffed onsite alarm stations, at least one of which must be protected in accordance with the requirements of the central alarms station within this section.

Consistent with 10 CFR 73.55(i)(3)(vii), the licensee's intrusion detection and assessment system must be designed to ensure intrusion detection and assessment equipment at the protected area perimeter remains operable from an uninterruptible power supply in the event of the loss of normal power.

**RAI-5.** In section 7 of the SCP, the first paragraph on page C-33 describes a piece of intrusion detection equipment at the site. This piece of equipment is not described in the PSP.

Describe the function of this piece of equipment within the physical protection program and how it is used to support the site's protective strategy. Also, describe how this intrusion detection equipment meets the requirements of 10 CFR 73.55(i), specifically, 73.55(i)(1) through 73.55(i)(3)(vi). Additionally, appropriate changes should be made during the next revision of the site's security plans to ensure the language clearly describes the function of this equipment and how the equipment meets the requirements of 10 CFR 73.55(i).

**Regulatory Basis for RAI-5:**

Consistent with 10 CFR 73.55(c )(1), licensee security plans must describe: (i) how the licensee will implement requirements of this section through the establishment and maintenance of a security organization, the use of security equipment and technology, the training and qualification of security personnel, the implementation of predetermined response plans and strategies, and the protection of digital computer and communication system and networks.

Consistent with 10 CFR 73.55(i), detection and assessment systems, (1) the licensee shall establish and maintain intrusion detection and assessment systems that satisfy the design requirements of 10 CFR 73.55(b) and provide, at all times, the capacity to detect and assess unauthorized persons and facilitate the effective implementation of the licensee's protective strategy.

Consistent with 10 CFR 73.55(i)(2) intrusion detection equipment must annunciate and assessment equipment shall display concurrently, in at least two continuously staffed onsite alarm stations, at least one of which must be protected in accordance with the requirements of the central alarm station within this section.

Consistent with 10 CFR 73.55(i)(3)(i) through (i)(3)(vi), the licensee's intrusion detection and assessment systems must be designed to: (i) provide visual and audible annunciation of the alarm; (ii) provide a visual display from which assessment of the detected activity can be made; (iii) ensure that annunciation of an alarm indicates the type and location of the alarm; (iv) ensure that alarm devices to include transmission lines to annunciators are tamper indicating and self-checking; (v) provide an automatic indication when the alarm system or a component of the alarm system fails, or when the system is operating on the back-up power supply; (vi) support the initiation of a timely response in accordance with the security plans, protective strategy, and associated implementing procedures.

===== end RAI items =====

Per the teleconference between Fermi 2 Nuclear Plant staff and NRC staff regarding the request for additional information for the Fermi 2 security plans conducted on October 5, 2012, the clarifying information below is provided.

4. Section 15.1 of the physical security plan (PSP) describes illumination and technology used to augment illumination at the site. Describe how the technology used to augment illumination provides the capability to perform protected area (PA) perimeter assessment in no-light or low-light conditions, and specifically during the loss of normal power. Describe how the technology, used to augment illumination during the loss of normal power, is integrated within the PA perimeter intrusion detection and assessment systems to meet the requirements of 10 CFR 73.55(e)(7)(i)(C), 73.55(i)(2), and 73.55(i)(3)(vii). See Security Frequently Asked Question (SFAQ) 10-15. Additionally, appropriate changes should be made during the next revision of the site's PSP to ensure the language clearly describes the type(s) of technology used to augment illumination for the assessment of the PA perimeter in no-light or low light conditions and during the loss of normal power, and how the technology meets the requirements of 10 CFR 73.55(e)(7)(i)(C), 73.55(i)(2), and 73.55(i)(3)(vii).

**Regulatory Basis:**

Consistent with 10 CFR 73.55(c)(3), the licensee shall establish, maintain, and implement a Physical Security Plan which describes how the performance objective and requirements set forth in this section will be implemented.

Consistent with 10 CFR 73.55(e)(7)(i)(C), isolation zones shall be monitored with assessment equipment designed to satisfy the requirements of Section 73.55(i) and provide real-time and play-back/recorded video images of the detected activities before and after each alarm annunciation.

Consistent with 10 CFR 73.55(i)(2), intrusion detection equipment must annunciate and video assessment equipment shall display concurrently, in at least two continuously staffed onsite alarm stations, at least one of which must be protected in accordance with the requirements of the central alarm station within this section.

Consistent with 10 CFR 73.55(i)(3)(vii), the licensee's intrusion detection and assessment systems must be designed to ensure intrusion detection and assessment equipment at the protected area perimeter remains operable from an uninterruptible power supply in the event of the loss of normal power.

Consistent with 10 CFR 73.55(i)(6)(iii), the licensee shall describe in the security plans how the lighting requirements of this section are met and, if used, the type(s) and application of low-light technology.

5. Section 7 of the safeguards contingency plan (SCP) describes safeguards systems that support the implementation of the protective strategy at the site. The first paragraph on page C-33 of the SCP describes a small portion of a barrier that is equipped with intrusion detection and assessment equipment. Describe the characteristics of this barrier and associated intrusion detection and assessment equipment. Describe how this barrier and associated intrusion detection and assessment equipment meets the requirements of 10 CFR 73.55. Specifically:

- a. Describe the function of this barrier by identifying how it and the associated intrusion detection and assessment capabilities are integrated within the physical protection program and protective strategy and how these capabilities are used to support the initiation of the protective strategy. Describe how the detection and assessment capability at this barrier facilitates the initiation of operator actions that are credited as target elements within target sets. Describe how the implementation of this barrier and associated intrusion detection and assessment equipment have been included in the drills and exercises of the site's protective strategy that have been conducted to meet the Performance Evaluation Program requirements of 10 CFR Part 73, Appendix B VI, C.3. Describe the percentage of drills and exercises, conducted since implementation of this barrier and associated intrusion detection and assessment equipment, in which initiation of the protective strategy resulted from adversary detection at the barrier.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(c)(3), the licensee shall establish, maintain, and implement a PSP which describes how the performance objective and requirements set forth in this section will be implemented.

Consistent with 10 CFR 73.55(e)(1)(ii), the licensee shall describe in the security plan, physical barriers, barrier systems, and their functions within the physical protection program.

- b. Describe how the openings in this barrier are secured and monitored to prevent exploitation of the openings.

**Regulatory Basis:**

In accordance with 10 CFR 73.55(e)(4), consistent with the stated function to be performed, openings in any barrier or barrier system established to meet the requirements of this section must be secured and monitored to prevent exploitation of the opening.

- c. Describe how vehicle and material access through this barrier is controlled.

**Regulatory Basis:**

In accordance with 10 CFR 73.55(g)(1), consistent with the function of each barrier or barrier system, the licensee shall control personnel, vehicle, and material access, as applicable, at each access control point in accordance with the physical protection program design requirements of 10 CFR 73.55, and 10 CFR 73.55(b).

- d. Describe the personnel, vehicle and material access control portals of the barrier, specifically whether they are located outside of, or co-located with, the barrier.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(g)(1)(i)(A), access control portals must be located outside of, or concurrent with, the physical barrier system through which it controls access.

- e. Describe how the locking devices, intrusion detection equipment, and surveillance equipment implemented at the personnel, vehicle, and material access control portals within this barrier meet regulatory requirements.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(g)(1)(i)(B), access control portals must be equipped with locking devices, intrusion detection equipment, and surveillance equipment consistent with the intended function.

- f. Describe the search procedures that have been implemented at access control portals within this barrier.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(h)(2)(i), where the licensee has established physical barriers in the owner controlled area, the licensee shall implement search procedures for access control points in the barrier.

- g. Describe how the intrusion detection and assessment equipment at this barrier provides, at all times, the capability to detect and assess unauthorized persons and facilitate the effective implementation of the protective strategy.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(i)(1), the licensee shall establish and maintain intrusion detection and assessment systems that satisfy the design requirements of 10 CFR 73.55(b) and provide, at all times, the capability to detect and assess unauthorized persons and facilitate the effective implementation of the licensee's protective strategy.

- h. Describe how the intrusion detection and assessment equipment at this barrier is designed to annunciate and display concurrently in two continuously staffed onsite alarm stations.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(i)(2), intrusion detection equipment must annunciate and assessment equipment shall display concurrently, in at least two continuously staffed onsite alarm stations, at least one of which must be protected in accordance with the requirements of the central alarm station within this section.

- i. Describe how the intrusion detection and assessment systems at this barrier are designed to: 1) provide visual and audible annunciation of an alarm; 2) provide a visual display from which assessment of the detected activity can be made; 3) ensure that the annunciation of an alarm indicates the type and location of the alarm; 4) ensure that alarm devices to include transmission lines to annunciators are tamper indicating and self-checking; 5) provide an automatic indication when the alarm system or a component of the alarm system fails, or when the system is operating on the back-up power supply; and 6) support the initiation of a timely response in accordance with the security plans, protective strategy, and associated implementing procedures.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(i)(3)(i) through (i)(3)(vi), the licensee's intrusion detection and assessment systems must be designed to: (i) provide visual and audible annunciation of the alarm; (ii) provide a visual display from which assessment of the detected activity can be made; (iii) ensure that annunciation of an alarm indicates the type and location of the alarm; (iv) ensure that alarm devices to include transmission lines to annunciators are tamper indicating and self-checking; (v) provide an automatic indication when the alarm system or a component of the alarm system fails, or when the system is operating on the back-up power supply; and (vi) support the initiation of a timely response in accordance with the security plans, protective strategy, and associated implementing procedures.

- j. Describe how unattended openings that intersect this barrier have been addressed to detect exploitation by surreptitious bypass.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(i)(5)(iii), unattended openings that intersect a security boundary such as underground pathways must be protected by a physical barrier and monitored by intrusion detection equipment or observed by security personnel at a frequency sufficient to detect exploitation.

- k. Describe the type of illumination assets that are implemented to ensure the area of this barrier is provided with the illumination necessary to satisfy the design requirements of 10 CFR 73.55(b) and implement the protective strategy.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(i)(6)(i), the licensee shall ensure that all areas of the facility are provided with illumination necessary to satisfy the design requirements of 10 CFR 73.55(b) and implement the protective strategy.

- l. Describe how the implementation of this barrier and associated intrusion detection and assessment equipment is included in security program reviews.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(m)(1), as a minimum the licensee shall review each element of the physical protection program at least every 24 months.

- m. Describe how this barrier and associated intrusion detection and assessment equipment is included in the site maintenance, testing, and calibration program and the intervals that the security equipment (intrusion detection and assessment, access control, and if applicable search equipment) at this barrier are tested for operability and performance.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(n)(1)(i), the licensee shall establish, maintain, and implement a maintenance, testing and calibration program to ensure that security systems and equipment, including secondary power supplies and uninterruptible power supplies, are tested for operability and performance at predetermined intervals, maintained in an operable condition, and are capable of performing their intended function.

- n. Describe the compensatory measures that are implemented when the barrier, intrusion detection, assessment, access control, and if applicable search equipment fails or becomes degraded.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(n)(1)(v), licensees shall implement compensatory measures that ensure the effectiveness of the onsite physical protection program when there is a failure or degraded operation of security-related component or equipment.

Additionally, appropriate changes should be made during the next revision of the site's security plans to ensure the language clearly describes the intended function of this barrier as it pertains to the implementation of certain aspects of the physical protection program (e.g., access control, initiation of the protective strategy, etc.) in accordance with 10 CFR 73.55(e)(1)(ii).

**Regulatory Basis:**

Consistent with 10 CFR 73.55(c)(3), the licensee shall establish, maintain, and implement a PSP which describes how the performance objective and requirements set forth in this section will be implemented.

Consistent with 10 CFR 73.55(e)(1)(ii), the licensee shall describe in the security plan, physical barriers, barrier systems, and their functions within the physical protection program.