

## **NRR-PMDAPEm Resource**

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**From:** Wiebe, Joel  
**Sent:** Thursday, December 13, 2012 9:16 AM  
**To:** David Helker  
**Subject:** Clarification of Request for Additional Information Related to Exelon Physical Security Plan Submittals (Correction)

This e-mail corrects the item letter identifiers. No changes to the clarifications were made.

### CLARIFICATION OF REQUEST FOR ADDITIONAL INFORMATION

RELATED TO PHYSICAL SECURITY PLAN SUBMITTALS FOR BRAIDWOOD STATION, UNIT NOS. 1 AND

2; BYRON STATION, UNIT NOS. 1 AND 2; CLINTON POWER STATION, UNIT 1; DRESDEN NUCLEAR

POWER STATION, UNITS 2 AND 3; LASALLE COUNTY STATION, UNITS 1 AND 2; LIMERICK

GENERATING STATION, UNITS 1 AND 2; OYSTER CREEK NUCLEAR GENERATING STATION; PEACH

BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3; QUAD CITIES NUCLEAR POWER STATION, UNITS

1 AND 2; AND THREE MILE ISLAND NUCLEAR STATION, UNIT 1

DOCKET NOS. STN 50-456, STN 50-457, STN 50-454, STN 50-455, 50-461, 50-10, 50-237, 50-249, 50-373,

50-374, 50-352, 50-353, 50-219, 50-277, 278; 50-254, 50-265, AND 50-289

By letters to the U.S. Nuclear Regulatory Commission (NRC) dated July 12 (Limerick only) and July 13, 2012, Exelon Generation Company, LLC (Exelon) submitted Revision 13 to the Braidwood Station Security Plan; Revision 12 to the Byron Station Security Plan; Revision 11 to the Clinton Power Station Security Plan; Revision 11 to the Dresden Station Security Plan; Revision 13 to the LaSalle County Station Security Plan; Revision 9 to the Limerick Physical Security Plan; Revision 12 to the Oyster Creek Nuclear Generating Station Security Plan; Revision 12 to the Peach Bottom Atomic Power Station Security Plan; Revision 9 to the Quad Cities Station Site Security Plan; and, Revision 14 to the Three Mile Island Security Plan. The revisions were submitted within 60 days of implementation in accordance with Title 10 of the Code of Federal Regulations (10 CFR) Section 50.54(p)(2).

By correspondence dated August 16 (Limerick, (Agencywide Documents and Management System (ADAMS) Accession No. ML122290318); August 16 (Peach Bottom ADAMS Accession No. ML122290347); August 27 (Three Mile Island, ADAMS Accession No. ML12233A630); August 30, (Dresden, LaSalle, and Quad Cities, ADAMS Accession No. ML12243A337); September 6 (Braidwood, ADAMS Accession No. ML 12242A356); September 6 (Oyster Creek, ADAMS Accession No. ML1229A433); September 13 (Byron, ADAMS Accession No. ML12243A472); and September 13 (Clinton, ADAMS Accession No. ML12241A342), 2012, the NRC staff requested additional information needed to complete its review.

By separate letters to the NRC dated September 14, 2012, Exelon submitted responses to the Peach Bottom and Limerick requests for additional information. Preliminary review of these responses showed that the specific questions for information and descriptions, likely to be safeguards information, were not answered and there was not enough information to determine if compliance with regulation 10 CFR Section 50.54(p)(2) was met.

During a discussion with your staff on September 18, 2012, the NRC staff confirmed that providing safeguards information, in response to the requests, is expected because it is similar to the information in the security plans that describe how the regulations are applied and allow a determination whether those regulations are being met. By letter dated October 5, 2012, the NRC, in acknowledgement of the discussion on September 18, 2012, regarding the detailed information required, revised the response date to November 19, 2012.

By letters dated November 2, 2, 15, 14, 19, 9, 9, 15, 7, and 15, 2012, Exelon submitted additional responses to the requests for Braidwood Station, Byron Nuclear Power Station, Clinton Power Station, Dresden Nuclear Power Station, LaSalle County Station, Limerick Generating Station, Oyster Creek Nuclear Generating Station, Peach Bottom Atomic Power Station, Quad Cities Nuclear Power Station, and Three Mile Island Nuclear Station, respectively. During review of the submittals the NRC staff determined that sufficient information was not submitted. On November 19, 2012, representatives from Exelon Generation Company, LLC and the NRC staff participated in a teleconference regarding the RAIs which resulted in a consensus for the NRC to provide clarification of the information required to ensure compliance with 10 CFR 50.54(p).

The clarifying information only addresses the remaining areas in which the site security plans and RAI responses do not adequately provide the required information. The clarifying information has been consolidated for all Exelon sites; however, under each item, the sites to which the item specifically pertains are identified. The responses to the clarifying information is necessary for the staff's determination regarding the impact of recent security plan changes to the effectiveness of site security plans consistent with 10 CFR 50.54(p). The NRC staff notes that 10 CFR 50.34(c)(3) requires that physical security plans describe how the requirements of 10 CFR Part 73 are met.

The following information is provided for clarification:

1. Section 11.1 of the Physical Security Plan (PSP) and Section 7 of the Safeguards Contingency Plan (SCP) within **all Exelon site** security plans describe the implementation of an Early Warning System (EWS) at the sites. **For each site identified**, describe how the EWS barrier and associated intrusion detection and assessment equipment that are identified in these sections of the security plans meet the requirements of 10 CFR 73.55. Specifically:

- a. Describe how personnel access through the EWS barrier at **LaSalle County Station, Limerick Generating Station, Oyster Creek Nuclear Generating Station, and Peach Bottom Atomic Power Station** 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).

- b. Describe the personnel access control portals of the EWS barrier, specifically whether they are located outside of, or co-located with, the EWS barrier at **LaSalle County Station, Limerick Generating Station, Oyster Creek Nuclear Generating Station, and Peach Bottom Atomic Power Station**.

**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.

- c. Describe how the locking devices, intrusion detection equipment, and surveillance equipment implemented at the EWS personnel access control portals at **LaSalle County Station, Limerick Generating Station, Oyster Creek Nuclear Generating Station, and Peach Bottom Atomic Power Station** 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.

- d. Describe the assessment equipment implemented at the EWS at **Quad Cities Nuclear Power Station** and how this assessment equipment provides, at all times, the capability to 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.

- e. Describe how the EWS assessment equipment at **Quad Cities Nuclear Power Station and Three Mile Island Nuclear Station** is designed to 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.

- f. Describe how the EWS intrusion detection systems at **all Exelon Nuclear Sites** are designed to: 1) provide visual and audible annunciation of an alarm; 2) ensure that the annunciation of an alarm indicates the type and location of the alarm; 3) 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. Describe how the EWS assessment systems at **Quad Cities Nuclear Power Station and Three Mile Island Nuclear Station** provide a visual display from which assessment of the detected activity can be made

**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.

- g. Describe how unattended openings that intersect the EWS barrier at **all Exelon Nuclear Sites** 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.

- h. Describe the type of illumination assets that are implemented at **all Exelon Nuclear Sites** to ensure the area of the EWS 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.

- i. Describe how the implementation of the EWS barrier and associated intrusion detection and assessment equipment at **all Exelon Nuclear Sites** 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.

- j. Describe the intervals that EWS security equipment (intrusion detection and assessment, access control, and if applicable search equipment) at **all Exelon Nuclear Sites** 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.

- k. Describe the compensatory measures that are implemented at **all Exelon Nuclear Sites** when the EWS 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 identified site's** security plans to ensure the language clearly describes the components of the EWS and how these components meet regulatory requirements.

**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.

- 2. In section 4.1.2 of the SCPs for **all Exelon Sites**, the security chain of command and delegation of authority is described. The description of the security chain of command and delegation of authority in the current revision of the SCPs has changed from the previous revision of the SCPs. Though this change was identified in the summary of changes that accompanied the security plans, the rationale for the change, and how the change was evaluated to ensure it did not decrease the effectiveness of the security plans was not provided. **For each site**, provide an explanation of the rationale for the change which demonstrates that the change does not constitute a decrease in the effectiveness of the security plans, specifically:
  - a. Describe the duties of the on-shift Security Supervisor during a safeguards contingency event.

- b. Describe the duties of the on-shift Security Supervisor during a safeguards contingency event when the Response Team Leader is unavailable. This description should address whether the on-shift Security Supervisor will be responsible for directing the response actions of the security organization at any time during a contingency event.
- c. Describe the protocols for delegating the command and control authority to the individuals listed in the current SCPs. This description should include the following: 1) the individual responsible for determining that delegating command and control authority is necessary; 2) how and by whom this delegation of authority is communicated to the security organization; 3) how this delegation of command and control authority is acknowledged by the individual designated; 4) how the security organization is trained to identify that a delegation of authority (which transfers the command and control of the security response to one of the individuals listed) has occurred during a safeguards contingency event.
- d. Describe who is responsible for command and control during a safeguards contingency event when the individuals listed in Section 4.1.2 of the current SCPs are unavailable to direct the actions of the security organization. This description should include the following: 1) the methodology for determining that delegating command and control authority in this particular situation is necessary; 2) how and by whom this delegation of authority is communicated to the security organization; 3) how this delegation of command and control authority is acknowledged by the individual designated; 4) how the security organization is trained to identify that a delegation of authority (which transfers the command and control of the security response to an individual not listed in Section 4.1.2 of the SCP) has occurred during a safeguards contingency event.

**Regulatory Basis:**

Consistent with 10 CFR 73.55(d)(2)(ii), the security organization must include at least one member, onsite and available at all times, who has the authority to direct the activities of the security organization and who is assigned no other duties that would interfere with this individual's ability to perform these duties in accordance with the security plans and the licensee protective strategy.

Consistent with 10 CFR Part 73, Appendix C II, B.3.a., the safeguards contingency plan must describe the organization's chain of command and delegation of authority during safeguards contingency events, to include a general description of how command and control functions will be coordinated and maintained.

- 3. Section 14.5 of the PSPs for **Byron Nuclear Power Station, Clinton Power Station, Dresden Nuclear Power Station, and LaSalle County Station** includes a vital area (VA) listing that identifies the VAs at the site. The list of VAs in the current revision of the PSP has changed from the list that was contained in previous revision of the PSP (a specific location was removed from the VA listing). Though this change was identified in the summary of changes that accompanied the security plans, the rationale for the change, and how the change was evaluated to ensure it did not decrease the effectiveness of the security plans was not provided. **For each site identified,** provide an explanation of the rationale for the change which demonstrates that the change does not constitute a decrease in the effectiveness of the security plans, specifically:
  - a. Describe the rationale for previously designating and protecting the area that was removed from the VA listing, as a VA.
  - b. Confirm that an evaluation of the equipment within the area that was removed from the VA listing was conducted and that consistent with the definition of "vital equipment" in 10 CFR 73.2, "Definitions," there is no vital equipment (to include the secondary power supplies for alarm annunciation equipment and non-portable communications equipment) within the area.

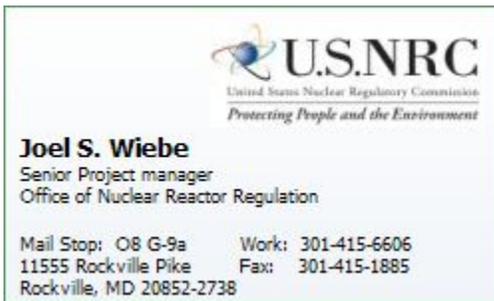
- c. Describe whether the area that was removed from the VA listing is still designated as a controlled area (i.e. access restricted to certain plant personnel) or has been designated as an uncontrolled area (i.e. allowing unrestricted access). If this area is still designated as a controlled area, describe how access to this area is controlled (e.g. card reader, locking mechanism, intrusion detection equipment, surveillance equipment, etc.).

**Regulatory Basis:**

Consistent with 10 CFR 73.2, "Definitions," vital equipment means any equipment, system, device, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation. Equipment or systems which would be required to function to protect public health and safety following such failure, destruction, or release are also considered to be vital.

Consistent with 10 CFR 73.55(e)(9)(i) through (e)(9)(vi)(B), (i) vital equipment must be located only within vital areas, which must be located within a protected area so that access to vital equipment requires passage through at least two physical barriers, except as otherwise approved by the Commission and identified in the security plans; (ii) the licensee shall protect all vital area access portals and vital area emergency exits with intrusion detection equipment and locking devices that allow rapid egress during an emergency and satisfy the vital area entry control requirements of this section; (iii) unoccupied vital areas must be locked and alarmed; (iv) more than one vital area may be located within a single protected area; (v) at a minimum, the following shall be considered vital areas: (A) The reactor control room; (B) The spent fuel pool; (C) The central alarm station; and (D) The secondary alarm station in accordance with § 73.55(i)(4)(iii); (vi) at a minimum, the following shall be located within a vital area: (A) the secondary power supply systems for alarm annunciation equipment; and (B) the secondary power supply systems for non-portable communications equipment.

Responses to this RAI clarifying information should be submitted to the NRC in accordance with 10 CFR 50.4.



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**Mail Envelope Properties** (Joel.Wiebe@nrc.gov20121213091600)

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