



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

October 17, 2012

Mr. George H. Gellrich, Vice President  
Calvert Cliffs Nuclear Power Plant, LLC  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657-4702

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 -  
REQUEST FOR ADDITIONAL INFORMATION REGARDING THE PHYSICAL  
SECURITY PLAN, TRAINING AND QUALIFICATION PLAN, AND  
SAFEGUARDS CONTINGENCY PLAN, REVISION 8

Dear Mr. Gellrich:

By letter dated August 2, 2012, Calvert Cliffs Nuclear Power Plant, LLC (the licensee) submitted the Physical Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 8 for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2.

The Nuclear Regulatory Commission staff is reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). On October 3, 2012, NRC staff and the licensee participated in a teleconference to discuss the questions within a draft copy of the RAI. The NRC staff is requesting a response to the RAI by November 2, 2012.

If you have any questions regarding this issue, please contact me at (301) 415-1016.

Sincerely,

A handwritten signature in black ink, appearing to read "Nadiyah S. Morgan", with a long horizontal line extending to the right.

Nadiyah S. Morgan, Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosure:  
RAI

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION  
REGARDING THE PHYSICAL SECURITY PLAN, TRAINING AND  
QUALIFICATION PLAN, AND SAFEGUARDS CONTINGENCY PLAN, REVISION 8  
CALVERT CLIFFS NUCLEAR POWER PLANT, LLC.  
CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 1 AND 2  
DOCKET NOS. 50-317 AND 50-318

In a letter dated August 2, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12219A233), Calvert Cliffs Nuclear Power Plant, LLC (the licensee), submitted the Physical Security Plan (PSP), Training and Qualification Plan, and Safeguards Contingency Plan (SCP), Revision 8 for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2 (Calvert Cliffs). The Nuclear Regulatory Commission (NRC) staff is reviewing the submittal to ensure compliance with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(p)(2).

As a result of the NRC's review, the NRC staff issued the licensee a draft request for additional information (RAI). Upon receipt and review of the RAI, the Calvert Cliffs staff requested a teleconference to clarify the questions within the RAI. On October 3, 2012, NRC staff and the licensee participated in a teleconference to discuss the questions within the RAI, which resulted in a consensus for the NRC to provide clarification of the information required to ensure compliance with 10 CFR 50.54(p).

To complete its review, the NRC staff requests the following additional information:

1. Section 11.1 of the PSP includes a description of an Owner Controlled Area (OCA) barrier and an early warning system at the site. Describe how the barrier and associated early warning system intrusion detection and assessment equipment that are identified in Section 11.1 of the PSP meet the requirements of 10 CFR 73.55. Specifically:
  - a. Describe the function of this OCA 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 OCA barrier facilitates the initiation of operator actions that are credited as target elements within target sets. Describe how the implementation of this OCA 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

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of this OCA barrier, in which initiation of the protective strategy resulted from adversary detection at this OCA 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 OCA 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 OCA 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 within this OCA barrier, specifically whether they are located outside of, or co-located with, the OCA 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 OCA personnel, vehicle, and material access control portals 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 OCA access control points within this OCA 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 OCA 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 OCA 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 associated with this OCA 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 OCA 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 OCA 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 OCA 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 OCA 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 the security OCA 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 intrusion detection, assessment, access control, and if applicable search equipment at this OCA barrier 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 OCA 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.

2. Section 5.9 of the SCP includes a description of protective measures for an Independent Spent Fuel Storage Installation (ISFSI). This section refers back to Section 18 of the PSP. These two sections appear to be in contradiction. Describe the protection measures used for the ISFSI. Do the measures described in Section 5.9 come from the measures described in Section 18 of the PSP? Additionally, the licensee should make appropriate changes during the next revision of Calvert Cliffs' PSP and SCP to ensure the language clearly describes what the protection measures are for the ISFSI in accordance with 10 CFR 73.55(c)(3) and (c)(5).

Describe how the response assets that are designated within Section 18 of the PSP implement the duties and responsibilities for the protection of both locations during simultaneous events.

October 17, 2012

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*/ra/*

Nadiyah S. Morgan, Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

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