NRR-PMDAPEm Resource

From: Feintuch, Karl
Sent: Tuesday, October 30, 2012 5:44 PM
To: 'Browning, Tony'; 'Barta, Doreen'
Cc: Costa, Richard
Subject: FW: D91660 - NextEra Energy Duane Arnold Physical Security Plan - RAI - This message is publically available and non-sensitive
Attachments: NSIR Phys Sec Plan DA RAI 2012-10-26.docx

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DRAFT REQUEST FOR ADDITIONAL INFORMATION (RAI)
10 CFR 50.54(p)(2) CHANGES TO SECURITY PLAN
NEXTERA ENERGY DUANE ARNOLD, LLC
DUANE ARNOLD ENERGY CENTER
DOCKET NO. 50-331
LICENSE NO. NPR-49

By letter dated August 3, 2012 (Agencywide Documents Access and Management System Accession No. ML12142A268) NextEra Energy Duane Arnold, LLC, (the licensee) submitted the Duane Arnold Energy Center Physical Security Plan (PSP), Training and Qualification Plan, and Safeguards Contingency Plan (SCP), Revision 13. The enclosure to the letter contained Safeguards Information and has been withheld from public disclosure. The U.S. Nuclear Regulatory Commission (NRC) 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.

1. Section 11.1 of the PSP and Section 7 of the SCP include descriptions of the Security Owner Controlled Area (SOCA) barriers at the site. Describe how the intrusion detection and assessment equipment that is identified in Section 11.1 of the PSP and Section 7 of the SCP meets 10 CFR 73.55 requirements. Specifically:

   a. Describe the function of the SOCA 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 the SOCA barrier facilitates the initiation of operator actions that are credited in target sets. Describe how the implementation of the SOCA 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 the SOCA barrier, in which initiation of the protective strategy resulted from adversary detection at the SOCA 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.

   In addition:
   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 the SOCA 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 personnel, vehicle, and material access through the SOCA barrier are 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(b).

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

Regulatory Basis:
Consistent with 10 CFR 73.55(h)(2)(i), where the licensee has established physical barriers in the Owner Controlled Area (OCA), the licensee shall implement search procedures for access control points in the barrier.

g. Describe how the intrusion detection and assessment equipment at the SOCA 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 the SOCA 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 Control Area Station within this section.

i. Describe how the SOCA intrusion detection and assessment systems 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 the SOCA 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 the SOCA 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 the SOCA 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 the SOCA 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 SOCA 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 SOCA 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 SOCA 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.).

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 PSP, physical barriers, barrier systems, and their functions within the physical protection program.

2. Section 14.4.1 of the PSP describes search processes conducted at OCA vehicle barrier system access control points. It is unclear from the language in this section how the search process is applied to all vehicles entering through the OCA vehicle barrier systems. Section 14.4.1 of the NRC endorsed NEI 03-12 Revision 7, template for security plans, contains a table describing vehicle searches conducted at OCA vehicle barrier systems; this table was not included in the Duane Arnold Energy Center PSP. NRC Regulatory Guide 5.76, "Physical Protection Programs at Nuclear Power Reactors," Section 4.11.6, also contains the table that provides guidance on vehicle searches conducted at OCA vehicle barrier systems. Describe the search process at each OCA vehicle barrier access control point and how the specific information within the identified vehicle search tables is applied at each vehicle barrier system. The description should include vehicle characteristics and how the search is conducted for visitors and personnel with unescorted access consistent with the information within the tables. Additionally, appropriate changes should be made during the next revision of the site's security plans to ensure the language clearly articulates the search process for all vehicles at each OCA vehicle barrier access control point.

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(h)(1), the objective of the search program is to detect, deter, and prevent the introduction of firearms, explosives, incendiary devices, or other items which could be used to commit radiological sabotage. To accomplish this, the licensee shall search individuals, vehicles, and materials consistent with the physical protection program design requirements in paragraph (b) of this section, and the function to be performed at each access control point or portal before granting access.

Karl Feintuch
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301-415-3079

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Recipients:
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Tracking Status: None
"'Browning, Tony'" <Tony.Browning@nexteraenergy.com>
Tracking Status: None
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Tracking Status: None

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    Regulatory Basis:
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    In addition:
    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 the SOCA 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 personnel, vehicle, and material access through the SOCA barrier are 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(b).

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Regulatory Basis:
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g. Describe how the intrusion detection and assessment equipment at the SOCA provides, at all times, the capability to detect and assess unauthorized persons and facilitate the effective implementation of the protective strategy.

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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.

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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 the SOCA 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 SOCA 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 SOCA 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 SOCA 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.).

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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 PSP, physical barriers, barrier systems, and their functions within the physical protection program.

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   Consistent with 10 CFR 73.55(h)(1), the objective of the search program is to detect, deter, and prevent the introduction of firearms, explosives, incendiary devices, or other items which could be used to commit radiological sabotage. To accomplish this, the licensee shall search individuals, vehicles, and materials consistent with the physical protection program design requirements in paragraph (b) of this section, and the function to be performed at each access control point or portal before granting access.

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