

PMNorthAnna3COLPEmails Resource

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Sent: Tuesday, April 15, 2014 2:07 PM
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Subject: Draft RAIs 7309 and 7476 for Section 13.6 of FSAR
Attachments: Draft RAI_7309.docx; Draft RAI_7476.docx

Hi,

Please see attached draft RAIs 7309 and 7476 for section 13.6 of the FSAR for North Anna 3 COLA. If you need any clarifications, please let me know before COB April 18, 2014. Otherwise it will be issued as final after that date.

Sincerely,
Chandu Patel

Hearing Identifier: NorthAnna3_Public_EX
Email Number: 1155

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Request for Additional Information (Draft)

Issue Date:

Application Title: North Anna, Unit 3 - Docket Number 52-017

Operating Company: Dominion

Docket No. 52-017

Review Section: 13.06.01 - Physical Security - Combined License

Application Section: NUREG-0800

QUESTIONS

Issue:

The North Anna Unit 3 COL Information Item, NAPS COL 13.6-16-A, Enclosure 2, Security Site Arrangement - Field of Fire drawing provided in the December 18, 2013 submittal was not clear.

Requests:

The NRC requests additional information to evaluate and assess the proposed defensive strategy and to compare this strategy to the information incorporated by reference from NEDE-33391, "The ESBWR Safeguards Assessment Report" Revision 3.

- 1) How does North Anna Unit 3 intend to meet the defense in depth for interdiction?
- 2) Provide an updated field of fire drawing to reflect fields of fire which account for obstructions, and coverage for all potential pathways (e.g., Power Block etc.).
- 3) Provide drawings, or similar information (e.g., table), that depict the initial response location for each of the identified minimum Armed Responders (AR) and Armed Security Officers (ASO) stated in the PSP, Section 18.
- 4) Additionally, for each AR and ASO who will not be in fixed positions, identify on the drawings or table or provide text to identify the starting location (e.g., ready room, on PA patrol) assumed for determining the proposed site protective strategy.

Regulatory Basis:

10 CFR 52.79(d)(3) The final safety analysis report must demonstrate that all requirements and restrictions set forth in the referenced design certification rule, other than those imposed under subsection 50.36b, must be satisfied by the date of issuance of the combined license. Any requirements and restrictions set forth in the referenced design certification rule that could not be satisfied by the time of issuance of the combined license, must be set forth as terms or conditions of the combined license.

10 CFR 52.79(a)(35)(i) A physical security plan, describing how the applicant will meet the requirements of 10 CFR part 73 (and 10 CFR part 11, if applicable, including the identification and description of jobs as required by § 11.11(a) of this chapter, at the proposed facility). The plan must list tests, inspections, audits, and other means to be used to demonstrate compliance with the requirements of 10 CFR parts 11 and 73, if applicable;

10 CFR 73.55(b)(3)(i) Ensure that the capabilities to detect, assess, interdict, and neutralize threats up to and including the design basis threat of radiological sabotage as stated in § 73.1, are maintained at all times.

10 CFR 73.55(b)(3)(ii) Provide defense-in-depth through the integration of systems, technologies, programs, equipment, supporting processes, and implementing procedures as needed to ensure the effectiveness of the physical protection program.

Issue:

Final Safety Analysis Report (FSAR) Part 2, Chapter 13 Section 13.6.

Regulatory Basis:

10 CFR 52.79(d)(3) The final safety analysis report must demonstrate that all requirements and restrictions set forth in the referenced design certification rule, other than those imposed under subsection 50.36b, must be satisfied by the date of issuance of the combined license. Any requirements and restrictions set forth in the referenced design certification rule that could not be satisfied by the time of issuance of the combined license, must be set forth as terms or conditions of the combined license.

Request:

Has North Anna Unit 3 considered the site-specific security footprint concerning seismic activity? If yes and a change were made, how is this change factored in with implementing the ESBWR reports?

North Anna, FSAR Part 2, Information Item NAPS COL 13.6-17-A, Figure 13.6-201 Security Site Arrangement - Physical Layout: The figure 13.6-201 in FSAR Part 2 (page 13-82) contains additional information which provides clarification on the site layout. Consider relocating figure 13.6-201 to Part 8, physical security plan.

Regulatory Basis:

10 CFR 52.79(a)(35)(i) A physical security plan, describing how the applicant will meet the requirements of 10 CFR part 73 (and 10 CFR part 11, if applicable, including the identification and description of jobs as required by &§ 11.11(a) of this chapter, at the proposed facility). The plan must list tests, inspections, audits, and other means to be used to demonstrate compliance with the requirements of 10 CFR parts 11 and 73, if applicable; (ii) A description of the implementation of the physical security plan;.

10 CFR 73.55(a)(2) The security plans must identify, describe, and account for site-specific conditions that affect the licensee's capability to satisfy the requirements of this section.

10 CFR 73.55(b) General performance objective and requirements. (1) The licensee shall establish and maintain a physical protection program, to include a security organization, which will have as its objective to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety.

10 CFR 73.55(e) *Physical barriers*. Each licensee shall identify and analyze site-specific conditions to determine the specific use, type, function, and placement of physical barriers needed to satisfy the physical protection program design requirements of § 73.55(b).

North Anna, Part 8, Physical Security Plan (PSP), Revision 4, Dated July 2013, Section 1.1, "Facility Physical Layout":

The physical security plan, PSP Section 1.1 provides site-specific information to identify, describe, and account for site-specific conditions that affect the licensee's capability to satisfy the requirements of 10 CFR 73.55(a)(2), 10 CFR 73.55(6)(b), and 10 CFR Part 73, Appendix C, Section II, paragraph B(3)(b).

- 1) Explain why PSP section 1.1 does not align with Safeguard Contingency Plan (SCP), Section 4.2 regarding the 10 CFR Part 73, Appendix C, Section II, paragraph B(3)(b) requirements for a "description" of the site in relation to nearby towns, transportation routes...etc.
- 2) Add the required descriptions into PSP, Section 1.1. Remove the sentence: A description and map of the site in relation to nearby towns, transportation routes, pipelines...are in the ESP SSAR and FSAR Chapter 2
- 3) In PSP Section 11.3, it is stated that "No railway into the PA exists at North Anna Power Station." Explain why in Section 1.1, last sentence states that "A spur line connects the site with this railroad line."

Regulatory Basis:

10 CFR 52.79(a)(35)(i) A physical security plan, describing how the applicant will meet the requirements of 10 CFR part 73 (and 10 CFR part 11, if applicable, including the identification and description of jobs as required by &§ 11.11(a) of this chapter, at the proposed facility). The plan must list tests, inspections, audits, and other means to be used to demonstrate compliance with the requirements of 10 CFR parts 11 and 73, if applicable; (ii) A description of the implementation of the physical security plan;

10 CFR 73.55(a)(2) The security plans must identify, describe, and account for site-specific conditions that affect the licensee's capability to satisfy the requirements of this section.

10 CFR 73.55(b) General performance objective and requirements. (1) The licensee shall establish and maintain a physical protection program, to include a security organization, which will have as its objective to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety.

10 CFR Part 73, Appendix C, Section II, paragraph B(3)(b). Plans must also include a description and map of the site in relation to nearby towns, transportation routes (e.g., rail, water, and roads), pipelines, airports, hazardous material facilities, and pertinent environmental features that may have an effect upon coordination of response activities. 10 CFR 52.17(a)(1)(x) Information demonstrating that site characteristics are such that adequate security plans and measures can be developed.

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North Anna, Part 8, Physical Security Plan (PSP), Revision 4, Dated July 2013, Subsection 11.2.3 and SCP, Section 7: It was stated by Dominion, that the North Anna, Part 8, PSP application for the "site" was revised from the NEI 03-12, Revision 6 template language to NEI 03-12, Revision 7, template language to be consistent with the existing operating plant. It appears that some North Anna "site" information in this application has been removed or changed as compared to the existing operating plan for North Anna Units 1 and 2, Revision 18, without explanation.

Concerning surveillance/equipment and OCA vehicle patrol:

- 1) Does North Anna have OCA patrol(s) (with contingency weapon(s)) that is part of the site protective strategy?
- 2) Does North Anna still have the “specifically named” CCTV monitoring in the CAS/SAS, of the OCA VBS checkpoint, owner controlled area barrier, certain areas of buildings, and observation of certain water structure?
- 3) Explain and justify why the information removed is not a decrease in effectiveness for the North Anna “site” security plan?

Any change information regarding the North Anna Units 1 and 2 operating site, or any shared information that may also affect the combined operating and new reactor “site” (e.g., Owner Controlled Area (OCA)) that will be used in this Part 8 application, must be changed by using the appropriate process.

For changes made to North Anna Unit 3, Part 8, the COL process under NUREG-0800 must be used. The applicant cannot make changes to existing operating reactor site information through the COL application process.

Regulatory Basis:

Title 10 CFR (10 CFR) 52, § 52.79(a)(35)(i) and (ii) requires that information submitted for combined license (COL) include how the applicant will meet the requirements of 10 CFR 73 and descriptions of implementation of the physical security plan.

10 CFR 73.55(i)(5)(ii) The licensee shall provide continuous surveillance, observation, and monitoring of the owner controlled area as described in the security plans to detect and deter intruders and ensure the integrity of physical barriers or other components and functions of the onsite physical protection program. Continuous surveillance, observation, and monitoring responsibilities may be performed by security personnel during continuous patrols, through use of video technology, or by a combination of both.

North Anna, Part 8, Physical Security Plan (PSP), Revision 4, Dated July 2013, Section 14.5:

- 1) Since there will be a shared PA between North Anna Units 1, 2 and 3, explain how many alarm stations will North Anna have for the combined site. If there are more than 2 for the entire site, update the applicable section(s)/figures to reflect the correct amount and locations for this “site” plan.
- 2) It was stated by Dominion, that the North Anna, Part 8, PSP application for the “site” was revised to be consistent with the existing operating plant (which is under the NEI 03-12 Revision 7 template).

Clarify whether or not the operating units Revision 18 version for the UPS system the exact same system that will be used for North Anna Unit 3? Explain the differences between the North Anna, PSP Revision 18 information regarding the Security UPS system, and the Part 8, PSP application for the same system.
- 3) If the existing UPS system is to be shared between the operating and new reactor sites, justify why the exact information was not transposed into the North Anna, Part 8 application. If the existing information concerning the UPS system is not to be shared, then justify why all information concerning North Anna Unit 3 was not placed in this “site” security plan.

Any change information regarding the North Anna Units 1 and 2 operating site, or any shared information that may also affect the combined operating and new reactor "site" (e.g., Owner Controlled Area (OCA)) that will be used in this Part 8 application, must be changed by using the appropriate process.

For changes made to North Anna Unit 3, Part 8, the COL process under NUREG-0800 must be used. The applicant cannot make changes to existing operating reactor site information through the COL application process.

Regulatory Basis:

10 CFR 73.55(c) *Security plans.* (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 systems and networks.
- (ii) Site-specific conditions that affect how the licensee implements Commission requirements.

North Anna, Part 8, Physical Security Plan (PSP), Revision 4, Dated July 2013, Subsection 14.4.5: Are the auxiliary access portals described in this section alarmed and have tamper indicators?

Regulatory Basis:

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 § 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.

(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.

(3) 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 backup power supply.
- (vi) Support the initiation of a timely response in accordance with the security plans, licensee protective strategy, and associated implementing procedures.
- (vii) 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.

North Anna, Part 8, Physical Security Plan (PSP), Revision 4, Dated July 2013, Section 15.1, paragraph 3: Describe the fixed and portable devices that are mentioned in this paragraph. Describe (and revise the PSP as necessary) the equipment, applications and training for using this or other low or no-light technology used by armed responders or armed security officers during contingency events.

Regulatory Basis:

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.

10 CFR 73.55(k)(1) The licensee shall establish and maintain, at all times, properly trained, qualified and equipped personnel required to interdict and neutralize threats up to and including the design basis threat of radiological sabotage as defined in § 73.1, to prevent significant core damage and spent fuel sabotage.

North Anna, Part 8, Physical Security Plan (PSP), Revision 4, Dated July 2013, Subsection 15.5.1, bullet numbers 2 and 3: The “select cameras” that are described in these paragraphs; where are they located? If the cameras are located inside the Owner Controlled Area, and part of the Protected Area surveillance, are they protected by tamper indicators?

Regulatory Basis:

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 § 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.

(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.

(3) 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 backup power supply.

(vi) Support the initiation of a timely response in accordance with the security plans, licensee protective strategy, and associated implementing procedures.

(vii) 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.

North Anna, Part 8, Physical Security Plan (PSP), Revision 4, Dated July 2013, Section 24.1.2 “Authority to Suspend”: It is understood that in the Part 8, Revision 2, dated June 28, 2010 of the North Anna security plan, there was a deviation from the NEI 03-12 Revision 6 template language based on terminology differences used at the Dominion sites. However, it is noticed that in the North Anna Unit 3, Part 8, PSP Revision 4, dated July 31, 2013, an added sentence was introduced without description and basis. After further review, it has been identified that there was a change in Part 8, Revision 3, dated July 18, 2011, that was not identified in a description of change document.

- 1) Explain why this change was not declared and described in Revision 3’s Part 8 submittal.
- 2) Provide revised basis to document this change.

Any change information regarding the North Anna Units 1 and 2 operating site, or any shared information that may also affect the combined operating and new reactor “site” (e.g., Owner Controlled Area (OCA)) that will be used in this Part 8 application, must be changed by using the appropriate process.

For changes made to North Anna Unit 3, Part 8, the COL process under NUREG-0800 must be used.

The applicant cannot make changes to existing operating reactor site information through the COL application process.

Regulatory Basis:

10 CFR 52.6 *Completeness and accuracy of information.* (a) Information provided to the Commission by a licensee (including an early site permit holder, a combined license holder, and a manufacturing license holder), a holder of a standard design approval under this part, and an applicant for a license or an applicant for a standard design certification or a standard design approval under this part, and information required by statute or by the Commission’s regulations, orders, license conditions, or terms and conditions of a standard design approval to be maintained by the licensee, the holder of a standard

design approval under this part, the applicant for a standard design certification under this part following Commission adoption of a final design certification rule, and an applicant for a license, a standard design certification, or a standard design approval under this part shall be complete and accurate in all material respects.

North Anna, Part 8, Training and Qualification Plan (T&QP), Subsection 3.6.4.1 and Critical Task Matrix (CTM), Task 30: Clarify whether or not North Anna has shotguns and enhanced weapons. If these weapons are not available at this site, remove the references from the North Anna security plan and identify the response as "Not Applicable" (N/A) in the CTM.

Regulatory Basis:

10 CFR 73.55(c) *Security plans*. (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 systems and networks.
- (ii) Site-specific conditions that affect how the licensee implements Commission requirements.

North Anna, Part 8, Training and Qualification Plan (T&QP), Critical Task Matrix, Task number 29 concerning the use of a Remotely Operated Weapons System (ROWS): Task number 29 is annotated as "Not Applicable" (N/A) for "Demonstrate Proficiency in use of ROWS." An affirmation (X) is annotated for other tasks identified under ROWS Operator indicating that these tasks are applicable and will be performed. The North Anna Units 1 & 2, T&QP Revision 18 has annotated an "N/A" under for the same tasks under ROWS Operator. Clarify the rationale for the discrepancy between the North Anna Unit 3 COL application T&QP and the North Anna Units 1 & 2 T&QP. Provide pertinent documentation concerning any planned use of ROWS for at North Anna Unit 3, and revise Task number 29 as needed to reflect the planned use of ROWS as it applies to the North Anna Unit 3 COL application T&QP.

Any change information regarding the North Anna Units 1 and 2 operating site, or any shared information that may also affect the combined operating and new reactor "site" (e.g., Owner Controlled Area (OCA)) that will be used in this Part 8 application, must be changed by using the appropriate process.

For changes made to North Anna Unit 3, Part 8, the COL process under NUREG-0800 must be used. The applicant cannot make changes to existing operating reactor site information through the COL application process.

Regulatory Basis:

10 CFR 73.55(c) *Security plans*.

...(4) Training and Qualification Plan. "The licensee shall establish, maintain, and implement, and follow a Training and Qualification Plan that describes how the criteria set forth in appendix B, section VI, to this part, "Nuclear Power reactor Training and Qualification Plan for Personnel Performing Security Program Duties," will be implemented."

Any change information regarding the North Anna Units 1 and 2 operating site, or any shared information that may also affect the combined operating and new reactor "site" (e.g., Owner Controlled Area (OCA)) that will be used in this Part 8 application, must be changed by using the appropriate process.

For changes made to North Anna Unit 3, Part 8, the COL process under NUREG-0800 must be used. The applicant cannot make changes to existing operating reactor site information through the COL application process.

North Anna, Part 8, Training and Qualification Plan (T&QP), Critical Task Matrix (CTM); Tasks 26 and 30:

- 1) Identify in these sections whether or not Tasks 26 and 30 are applicable to North Anna. Revise the CTM as appropriate.
- 2) Regarding the CTM, justify why there appears to be a significant difference in the training requirements for the existing operating site, Revision 18, as compared to this application which contains both operating and Unit 3 "site" information.

Any change information regarding the North Anna Units 1 and 2 operating site, or any shared information that may also affect the combined operating and new reactor "site" (e.g., Owner Controlled Area (OCA)) that will be used in this Part 8 application, must be changed by using the appropriate process.

For changes made to North Anna Unit 3, Part 8, the COL process under NUREG-0800 must be used. The applicant cannot make changes to existing operating reactor site information through the COL application process.

Regulatory Basis:

Title 10 CFR (10 CFR) 52, § 52.79(a)(35)(i) and (ii) requires that information submitted for combined license (COL) include how the applicant will meet the requirements of 10 CFR 73 and descriptions of implementation of the physical security plan.

10 CFR 73.55(c) *Security plans*. (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 systems and networks.
- (ii) Site-specific conditions that affect how the licensee implements Commission requirements.

North Anna, Part 8, Training and Qualification Plan ,(T&QP), Critical Task Matrix and Safeguards Contingency Plan (SCP), Section 4.1.2:

1. Clarify whether or not the Security Shift Supervisors (SSS) and Response Team Leaders (RTL) are alarm station qualified to assist in alarm station duties if necessary (e.g., provide the alarm station operators breaks, emergency situations)? If the SSS and RTL are not qualified, then identify who provides operator breaks and confirm that the relief officer/supervisor is CAS/SAS qualified. If the SSS and RTL are alarm station qualified, explain why the Tasks for Alarm Station Operators are not selected for these individuals.
2. In Subsection 4.1.2; confirm in the security plan that all listed in the chain of command are RTL qualified as per Task 21, "Direct Response Team Activities".

Regulatory Basis:

Title 10 CFR (10 CFR) 52, § 52.79(a)(35)(i) and (ii) requires that information submitted for combined license (COL) include how the applicant will meet the requirements of 10 CFR 73 and descriptions of implementation of the physical security plan.

10 CFR 73.55(c) *Security plans*. (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 systems and networks.
- (ii) Site-specific conditions that affect how the licensee implements Commission requirements.

10 CFR 73.55(c) *Security plans*.

...(4) Training and Qualification Plan. "The licensee shall establish, maintain, and implement, and follow a Training and Qualification Plan that describes how the criteria set forth in appendix B, section VI, to this part, "Nuclear Power reactor Training and Qualification Plan for Personnel Performing Security Program Duties," will be implemented."

North Anna, Part 8, Physical Security Plan (PSP), Revision 4, Dated July 2013, Section 11.3 and Figure 3:

Clarify that the rail spur has been completely removed from the Owner Controlled Area (OCA) and the Protected Area (PA) barrier. Your response should confirm that the rail spur has been completely removed from the OCA or PA, and revise the picture references from Figures 3 and 6.

If the rail spur has been removed only from the PA barrier, but not from the OCA, provide a depiction of the railway leading up to and ending at the point of removal. If the rail spur still exists in the OCA, identify in the appropriate sections whether or not train derailleurs are used. Provide updates to the appropriate sections as necessary.

Regulatory Basis:

10 CFR 73.55(c) *Security plans.* (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 systems and networks.

(ii) Site-specific conditions that affect how the licensee implements Commission requirements.

10 CFR 73.55(e)(10)(D) Where a site has rail access to the protected area, install a train derailer, remove a section of track, or restrict access to railroad sidings and provide periodic surveillance of these measures.

Request for Additional Information (Draft)

Issue Date:

Application Title: North Anna, Unit 3 - Docket Number 52-017

Operating Company: Dominion

Docket No. 52-017

Review Section: 13.06.01 - Physical Security - Combined License

Application Section: NUREG-0800

QUESTIONS

Regarding the December 18, 2013 submittal, Enclosure number 3: Submit engineering analyses substantiating that the design meets the requirements of 10 CFR 73.1, "Purpose and Scope," and 10 CFR 73.55, "Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors Against Radiological Sabotage." Specifically, the engineering analyses must address requirements of 10 CFR 73.1(a)(1)(iii) as clarified in Section 1-3 of Regulatory Guide (RG) 5.69, "Guidance for the Application of the Radiological Sabotage Design-Basis Threat in the Design, Development, and Implementation of a Physical Security Protection Program That Meets 10 CFR 73.55 Requirements." If applicable, submit engineering analyses substantiating that the design meets the requirements of 10 CFR 73.1(a)(1)(iv), as clarified in Section 1-4 of RG 5.69.

Regulatory Basis:

10 CFR 73.1 (a)(1)(iii) A land vehicle bomb assault, which may be coordinated with an external assault; ...

10 CFR 73.1(a)(1)(iv) A waterborne vehicle bomb assault, which may be coordinated with an external assault; ...

10 CFR 73.55 (a) Introduction. (1) By March 31, 2010, each nuclear power reactor licensee, licensed under 10 CFR part 50, shall implement the requirements of this section through its Commission-approved Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Cyber Security Plan referred to collectively hereafter as "security plans." Current applicants for an operating license under 10 CFR part 50, or combined license under 10 CFR part 52 who have submitted their applications to the Commission prior to the effective date of this rule must amend their applications to include security plans consistent with this section.

(2) The security plans must identify, describe, and account for site-specific conditions that affect the licensee's capability to satisfy the requirements of this section.

10 CFR 73.55(e) *Physical barriers*. Each licensee shall identify and analyze site-specific conditions to determine the specific use, type, function, and placement of physical barriers needed to satisfy the physical protection program design requirements of § 73.55(b).

(1) The licensee shall: (i) Design, construct, install and maintain physical barriers as necessary to control access into facility areas for which access must be controlled or denied to satisfy the physical protection program design requirements of paragraph (b) of this section. (ii) Describe in the physical security plan, physical barriers, barrier systems, and their functions within the physical protection program. (2) The licensee shall retain, in accordance with § 73.70, all analyses and descriptions of the physical barriers and barrier systems used to satisfy the requirements of this section, and shall protect these records in accordance with the requirements of § 73.21. (3) Physical barriers must: (i) Be designed and constructed to: (A) Protect against the design basis threat of radiological sabotage; (B) Account for site-specific conditions; and (C) Perform their required function in support of the licensee physical protection program. (ii) Provide deterrence, delay, or support access control. (iii) Support effective implementation of the licensee's protective strategy. (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. (5) Bullet Resisting Physical Barriers. The reactor control room, the central alarm station, and the location within which the last access control function for access to the protected area is performed, must be bullet-resisting. (6) Owner controlled area. The licensee shall establish and maintain physical barriers in the owner controlled area as needed to satisfy the physical protection program design requirements of § 73.55(b).

10 CFR 73.55 (e)(10) Vehicle control measures. Consistent with the physical protection program design requirements of § 73.55(b), and in accordance with the site-specific analysis, the licensee shall establish and maintain vehicle control measures, as necessary, to protect against the design basis threat of radiological sabotage vehicle bomb assault. (i) Land vehicles. Licensees shall: (A) Design, construct, install, and maintain a vehicle barrier system, to include passive and active barriers, at a stand-off distance adequate to protect personnel, equipment, and systems necessary to prevent significant core damage and spent fuel sabotage against the effects of the design basis threat of radiological sabotage land vehicle bomb assault.