

PMNorthAnna3COLPEmails Resource

From: Patel, Chandu
Sent: Wednesday, November 09, 2011 10:42 AM
To: 'na3raidommailbox@dom.com'
Cc: Weisman, Robert; PMNorthAnna3COLPEmails Resource; Johnson, Judy; Takacs, Michael
Subject: RAI Letter No. 89, RAI 6008, FSAR Section 13.6, North Anna 3 COLA
Attachments: RAI Letter 89 RAI 6008.doc

By letter dated November 26, 2007, Dominion Virginia Power (Dominion) submitted a Combined License Application for North Anna, Unit 3, pursuant to Title 10 of the *Code of Regulations*, Part 52. The U.S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this COLA.

The NRC staff has identified that additional information is needed to continue portions of the review and a Request for Additional Information (RAI), is enclosed. To support the review schedule, Dominion is requested to respond within 30 days of the date of this request. If the RAI response involves changes to the application documentation, Dominion is requested to include the associated revised documentation with the response.

Sincerely,
Chandu Patel
Lead Project Manager for NA3 COLA

Hearing Identifier: NorthAnna3_Public_EX
Email Number: 1029

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Subject: RAI Letter No. 89, RAI 6008, FSAR Section 13.6, North Anna 3 COLA
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From: Patel, Chandu

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Tracking Status: None

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Tracking Status: None

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RAI Letter No. 89
11/9/2011
North Anna, Unit 3
Dominion
Docket No. 52-017
SRP Section: 13.06.01 - Physical Security - Combined License
Application Section: 13.6 - Physical Security

QUESTIONS for Reactor Security Rulemaking and Licensing Branch (NSIR/DSP/RSRLB)

Request for Additional Information No. 6008

13.06.01-53

Physical Security Plan, page 1, section 1.1. List all site structures, (e.g. ISFSI etc.)

Regulatory Basis: Title 10 CFR 73, Appendix C, Section II (B)(3)(b), Physical Layout, requires the safeguards contingency plan to "include a site map depicting the physical structures located on the site, including onsite independent spent fuel storage installations (if applicable), and a description of the structures depicted on the map. Plans must also include a descriptions 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. Descriptions and maps must indicate main and alternate entry routes for law enforcement or other offsite response and support agencies and the location for marshaling and coordinating response activities.

13.06.01-54

Physical Security Plan, page 2, section 2, second sentence from the bottom. Justify the added language "or equivalent measure that meet the same high assurance objectives provided by paragraphs (a) through (r)".

Regulatory Basis: Title 10 CFR 52.6, Completeness and accuracy of information, requires information provided "shall be complete and accurate in all material respects."

13.06.01-55

Physical Security Plan, page 10, section 11.3. Clarify whether or not North Anna Power Station has a SSACB.

Regulatory Basis: Title 10 CFR 52.6, Completeness and accuracy of information, requires information provided "shall be complete and accurate in all material respects."

13.06.01-56

Physical Security Plan, page 19, section 14.4.6. Clarify if the sentence that contains "The applicable site at which access is being requested" is corporate language or language that pertains only to North Anna Power Station. If corporate language, clarify the statement for this COL application.

Regulatory Basis: Title 10 CFR 52.6, Completeness and accuracy of information, requires information provided "shall be complete and accurate in all material respects."

13.06.01-57

North Anna Power Station Unit 3, Supplement to US-APWR High Assurance Evaluation Assessment, Revision 0, dated April 2010:

- 1) Provide clarification as to if the North Anna Power Station Unit 3, "Supplement to US-APWR High Assurance Evaluation Assessment," Revision 0, dated April 2010 is still applicable or has it been replaced in its entirety by the North Anna Power Station Unit 3, "Physical Security Protection System Report," Revision 1, dated July 2011?

- 2) If the "Supplement to US-APWR High Assurance Evaluation Assessment," Revision 0, has been replaced in its entirety by the North Anna Power Station Unit 3, "Physical Security Protection System Report," Revision 1, is Figure 1, "MSSD Boundary for the North Anna Unit 3," from the "Supplement to US-APWR High Assurance Evaluation Assessment" going to be included in the next revision of the "Physical Security Protection System Report?"

Regulatory Basis: 10 CFR 73.55 (c), Security Plans, states that the Licensee security plans must describe the site-specific conditions that affect how the licensee implements Commission requirements. In addition, Title 10 CFR 73.55(b)(3) requires the applicant design the physical protection program to prevent significant core damage and spent fuel sabotage with assurance of the capabilities to detect, assess, interdict, and neutralize the DBT, and maintain at all times such capabilities with defense-in-depth. Title 10 CFR 73.55(b)(4) requires the applicant to analyze and identify site specific conditions, including target sets, that may affect the specific measures needed to implement the requirements of 10 CFR 73 and account for conditions in the design of the physical protection program. Complete and accurate information (i.e., descriptions) is needed for the staff to perform its review.

13.06.01-58

The following is a supplemental Question for RAI 5232, Question No. 13.06.01-33 for closure and development of an SE with O/I:

Regarding TR UAP-SGI-08002, Revision 2 Section 4.0 discussions and Table 4.1 and discussions in the PSPSR, Sections 3.0 through 3.3 to include Target Set Groups that were not selected based on application of criteria greater than 8-hours as a threshold for eliminating sequences of events leading to core damage and loss of SFP cooling. The inclusion of all Target Set Groups currently identified as "not selected" in Section 4 discussions including Table 4-1 of UAP-SGI-08002, Revision 2 would provide an accurate and complete target sets acceptable for what must be protected for the USAPWR standard design for radiological sabotage.

Regulatory Basis: Subpart C of Title 10 CFR Part 52, § 52.79(a)(35)(i), (ii), and (iv) requires that the Combined license (COL) applicant submit information in the COL application that discusses how the applicant will meet the requirements of 10 CFR 73. Title 10 CFR 73.55(b)(3) requires the applicant design the physical protection program to prevent significant core damage and spent fuel sabotage with assurance of the capabilities to detect, assess, interdict, and neutralize the DBT, and maintain at all times such capabilities with defense-in-depth. Title 10 CFR 73.55(b)(4) requires the applicant

to analyze and identify site specific conditions, including target sets, that may affect the specific measures needed to implement the requirements of 10 CFR 73 and account for conditions in the design of the physical protection program. Target sets must be sufficiently complete and accurate and describe what must be protected for meeting performance requirements of Title 10 CFR 73.55(b)(3). Deletion of TSG identified based on time constraints is contrary to regulatory requirements and does not conform to guidance provided RG 5.81. Based on review of RAI response, including the revised PSPSR and TR UAP-SGI-08002, Revision 2, High Assurance Evaluation Assessment, that is incorporated by reference, the supplemental questions to RAI previously issued is required to achieve full closure and development of an SE with no Open Item.

The supplemental follow-up question above relates to RAI Question No. 13.06.01-33 (RAI No. 5232), that requested the following:

- a. (U) Provide the technical bases for applying the criteria of greater than 8-hours as a threshold for core damage or the loss of spent fuel pool cooling in selecting TSG identified in the PSPSR Sections 3.0 through 3.3 and UAP-SGI-08002, Revision 2, Table 4.1. Justify how both the PSPSR and the referenced technical report meets the requirement of 10 CFR 73.55(b)(3) that the physical protection program must be designed to prevent significant core damage and spent fuel sabotage. This regulation does not establish constraints based on duration to core damage and excluded TSG, which would be unprotected to prevent the adversary capabilities of the design basis threat (DBT) to initiate the sequence of events for radiological sabotage.

Regarding TR UAP-SGI-08002, Revision 2 and discussions in the PSPSR, Sections 3.0 through 3.3, it may be retained to describe the possible capabilities of recovering or possible outcome as from a DBT event (i.e., defense-in-depth). The applicant's licensing basis described in the COLA does not address the capabilities of required engineered, administrative, and management controls, including training and pre-planning, to support the assumption of "regain[ing] control of the plant after a security event," within a time frame (i.e., 8 hrs) . Specifically, the plans and strategy described do not describe how engineered and administrative controls and management measures, including the assurance of the reliability and availability of offsite law enforcement agencies and licensee's personnel and equipment, provide the response capabilities necessary to support the assumption stated.

13.06.01-59

Physical Security Plan, Revision 3, (North Anna Station Units 1 and 2, and 3 Combined Operating License Application (COLA) Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan) Section 18, details the minimum number of armed responders continuously in the protected area and the minimum number of armed responders who are available onsite to implement the protective strategy.

Provide a detailed metric of your staffing conclusion whereby you compared the minimum number of armed responders as described in Section 18 of the PSP with the actions and/or protective strategies described in the North Anna Power Station Unit 3 Physical Security Protection Systems Report, Revision 1, the US-APWR High Assurance Evaluation Assessment (UAP-SGI-08002), Revision 2 and the protective strategies needed to support North Anna Units 1 and 2. Include in your staffing matrix, the armed responders located in the BRES/BBREs.

Regulatory Basis:

10 CFR 73.55(k)(5)(i) The licensee shall determine the minimum number of armed responders necessary to satisfy the design requirements of § 73.55(b) and implement the protective strategy. The licensee shall document this number in the security plans. (ii) The number of armed responders shall not be less than ten (10). (iii) Armed responders shall be available at all times inside the protected area and may not be assigned other duties or responsibilities that could interfere with their assigned response duties.