CCNPP3COLA NPEmails

From: Arora, Surinder
Sent: Monday, January 04, 2010 9:10 AM
To: 'Poche, Robert'; 'cc3project@constellation.com'
Cc: CCNPP3COL Resource; Huyck, Doug; Lee, Peter; Colaccino, Joseph; Miernicki, Michael; Jennings, Jason; Biggins, James; Vrahoretis, Susan; Hair, Christopher
Subject: FINAL RAI No. 197 NSIR 3832
Attachments: FINAL RAI 197 NSIR 3832.doc

Rob,

Attached please find the subject request for additional information (RAI). The draft of this RAI was sent to you on December 9, 2009. No clarification phone call on the draft RAI was requested by UniStar during the review period.

The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a schedule date for submitting your technically correct and complete response will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the review schedule.

Your response letter should also include a statement confirming that the response does or does not contain any sensitive or proprietary information.

Thanks.

SURINDER ARORA, PE
PROJECT MANAGER,
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Hearing Identifier: CalvertCliffs_Unit3Cola_NonPublic_EX
Email Number: 3126

Mail Envelope Properties (B46615B367D1144982B324704E3BCEED1AAE9CEE3F)

Subject: FINAL RAI No. 197 NSIR 3832
Sent Date: 1/4/2010 9:09:38 AM
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From: Arora, Surinder

Created By: Surinder.Arora@nrc.gov

Recipients:
"CCNPP3COL Resource" <CCNPP3COL.Resource@nrc.gov>
Tracking Status: None
"Huyck, Doug" <Doug.Huyck@nrc.gov>
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"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>
Tracking Status:: Response: None : 12/2/2009 8:06:00 AM
"Miernicki, Michael" <Michael.Miernicki@nrc.gov>
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Tracking Status: None
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Tracking Status: None
"Vrahoretis, Susan" <Susan.Vrahoretis@nrc.gov>
Tracking Status: None
"Hair, Christopher" <Christopher.Hair@nrc.gov>
Tracking Status:: Response: None : 12/2/2009 8:06:00 AM
"'Poche, Robert'" <Robert.Poche@constellation.com>
Tracking Status: None
"'cc3project@constellation.com'" <cc3project@constellation.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

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MESSAGE	1408	1/4/2010 9:09:41 AM
FINAL RAI 197 NSIR 3832.doc	48122	

Options
Priority: Standard
Return Notification: No
Reply Requested: Yes
Sensitivity: Normal
Expiration Date:
Recipients Received:

Request for Additional Information No. 197 (eRAI 3832)

1/4/2010

Calvert Cliffs Unit 3
UniStar
Docket No. 52-016
SRP Section: 14.03.12 - Physical Security Hardware - Inspections, Tests, Analyses, and Acceptance Criteria
Application Section: Part 2, FSAR Chapter 14, Verification Program and Part 10, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) and ITAAC Closure, Revision 5

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

14.03.12-1

1. **(U)** Part 2, Chapter 14, Verification Program (Page 14-3 to 14-13): Describe the management controls and processes of a verification program (e.g., organization, staffing, training, procedure development, conduct of ITA, review, evaluation, and approval of test results, records, etc.) for the verification and closure of security ITAAC. Specifically, clarify whether descriptions of management controls and processes in Sections 14.2.2 through 14.2.12 will be applied for planning and conducting ITA required for verification and closure of physical security ITAAC. In addition, clarify whether the same management controls and processes are applicable or include non-ITAAC verifications such as readiness of operation programs described in Part 10, Section 6. Provide descriptions the management controls and processes that will be applied for assuring adequate operational readiness reviews of physical security operational programs.

(U) Regulatory Basis: Subpart B of Title 10 CFR (10 CFR) 52, § 52.47, requires that information submitted for a design certification (DC) must include performance requirements and design information sufficiently detailed to permit the preparation of acceptance and inspection requirements by the NRC, and procurement specifications and construction and installation specifications by an applicant. Subpart B of 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. Subpart C, Title 10 CFR 52.80 requires that the application must contain the proposed inspections, tests, and analyses, and acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria are met, the facility has been constructed and will be operated in conformity with the combined license, the provisions of the Act, and the Commission's rules and regulations. The COL item of the standard US-EPR DC requires that COL applicant to verify ITAAC for physical protection and identify site specifics ITAAC. Table 14.3-3, Interface Requirements Screening (Page 14-38) addresses ITAAC required for verifying physical protection systems and features providing detection, assessment, delay, and response for protection against the DBT. In addition, Part 10 of the COL application on site specific ITAAC must include ITA and acceptance criteria to verifying security design, performances, and functions in accordance with design. Part 2, FSAR, Chapter 14, Section 14.2 describe the organization and staffing, test procedures, conduct of test program, the review, evaluation, and approval of test results, and test

records for apparent verification of safety-related ITAAC. Clarification is needed on whether the management controls and processes described are applied to physical security ITAAC or how management controls and processes will be provided for the assurance of adequate operational program readiness reviews. The US-EPR FSAR include COL item in Section 14.2.2 that a COL applicant will provide site-specific information that describe the organizational unit that manage, supervise, or execute any phases of the test program.

14.03.12-2

2. **(U)** Part 10, Appendix A, ITAAC and ITAAC Closure, Section 5, Proposed License Condition (Page 1-6 to 1-7): Confirm that UniStar intends to fully implement physical protection requirements (i.e., all physical protection systems and operational programs) of an operating reactor in accordance with 10 CFR 73, including Appendix B and Appendix C, prior to initial receipt of fuel, as stated in Item 15 of the proposed license conditions and milestones. **[13911]**

(U) Regulatory Basis: Subpart B of 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. Proposed license condition (Item 15) states that the applicant will full implement and maintain in effect the provisions of the Security Plan, which consists of the physical security plan, security personnel training and qualification plan, and safeguards contingency plan, . . . to Part 52 when nuclear fuel is first received onsite . . . ," consistent with application Part 2 FSAR Table 13.4-1. Title 10 CFR 73.67, Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance, along with 10 CFR Part 74, Material Control and Accounting of Special Nuclear Material," and security enhancements ordered after the events of 9/11 are the current regulatory requirements for physical protection of un-irradiated reactor fuel assemblies (i.e., possession and storage of Category III SNM in accordance with 10 CFR 70). The current regulation do not specifically states that 10 CFR 73.67 is applicable to Part 52 licensees, but clearly states applicability to Part 50 licensees. The stated regulatory requirements for possession and storage of Category III SNM may be applied based on NRC Regulatory Guide 5.76, with appropriate justifications within NRC regulatory framework (i.e., a request for exemption in accordance with 10 CFR 52.93 and 10 CFR Part 73.55(a)(4)).

14.03.12-3

3. **(U)** Part 10, Appendix A, ITAAC and ITAAC Closure, Section 5, Security Plan Revisions, Proposed License Condition (Pages 1-6 to 1-7): Complete information or describe what will be provided for the unfilled bracketed text related to appendix and section of Part 52 in the proposed license condition.

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

14.03.12-4

4. **(U)** Part 10, Appendix A, ITTAC and ITAAC Closure, Section 6, Proposed License Condition (Page 1-7): Confirm that the proposed license condition for submitting the schedule for planning and conducting of NRC inspections of operations programs will include the conduct of force-on-force inspections. Provide, or indicate where in the COL application, the descriptions of schedule for implementation of security programs and milestones.

(U) Regulatory Basis: Subpart B of 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. Title 10 CFR 52.79(a)(35)(ii) requires descriptions for the implementation of the physical security plan. Subpart C, Title 10 CFR 52.80 requires that the application must contain the proposed inspections, tests, and analyses, and acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria are met, the facility has been constructed and will be operated in conformity with the combined license, the provisions of the Act, and the Commission's rules and regulations. Proposed license condition in Appendix A, Section 2, include identification of appropriate implementation milestones for operational programs. NRC letter to NEI dated January 8, 2008, titled "Nuclear Energy Institute Template for Combined License Applicant's Submission of Security Implementation Schedule for New Reactors," (ML073050100) provides response and acceptance with comments an Industry proposed guidance for key programs and milestones that may be used new reactor applicant in support of proposed license condition. An applicant may use the template as guidance for the descriptions of appropriate schedule and key physical security systems and programs milestones.

14.03.12-5

5. **(U)** Part 10, Appendix B, ITTAC, Section 2, COL Application ITAAC (Page 1-14) and Table 2.2-1 – Physical Security ITAAC (Pages 1-15 and 1-16) Section 6, Proposed License Condition (Page 1-7): Provide revision to ITAAC descriptions to address physical protection systems described in 73.55(h)(6)(ii), 10 CFR 73.55(e)(7)(i)(C), and 10 CFR 73.55(i)(4)(ii)(H)(iii) of the revised security rule. Delete Table 2.2-1 or revise the table to indicate only the site specific ITAAC not already described in Tier 1 of the US-EPR standard design.

(U) Regulatory Basis: Subpart B of Title 10 CFR (10 CFR) 52, § 52.47, requires that information submitted for a design certification (DC) must include performance requirements and design information sufficiently detailed to permit the preparation of acceptance and inspection requirements by the NRC, and procurement specifications and construction and installation specifications by an applicant. Tier 1 and Tier 2 descriptions of ITAAC for physical security systems must address new regulatory requirements identified in 73.55(h)(6)(ii), 10 CFR 73.55(e)(7)(i)(C), and 10 CFR 73.55(i)(4)(ii)(H)(iii). Subpart C, Title 10 CFR 52.80 requires that the application must contain the proposed inspections, tests, and analyses, and acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria are met, the facility has been constructed and will be operated in conformity with the combined license, the provisions

of the Act, and the Commission's rules and regulations. NRC revised Standard Review Plan (SRP) 14.3.12 provides acceptable revised generic ITTAC descriptions for new reactor applicants. Section 2.2 in Appendix B states that "the Physical Security ITAAC are contained in U.S. EPR FSAR Tier 1, which is incorporated by reference in Section 1, Tier 1 Information." Table 2.2-1, on Pages1-15 and 1-16, is not required if the information identified as site specific ITAAC are the same as those incorporated by reference and the descriptions of ITAAC incorporated by reference appropriately include physical protection systems described in the revised rule.

14.03.12-6

6. **(U)** Part 10, Appendix B, ITTAC, Table 2.4-9 – Buried Duct Banks and Pipes Inspections, Tests, Analyses, and Acceptance Criteria (Page 1-43): Indicate inspections for verifying that the as-built or installation of buried piping passing through the Vital and Protected Areas meets the design requirements for physical protection as described in CCNPPU3 Security Assessment. In addition, indicate in the acceptance criteria that the installation meets the detail design and performance requirements for securing penetrations.

(U) Regulatory Basis: Subpart B of Title 10 CFR (10 CFR) 52, § 52.47, requires that information submitted for a design certification (DC) must include performance requirements and design information sufficiently detailed to permit the preparation of acceptance and inspection requirements by the NRC, and procurement specifications and construction and installation specifications by an applicant. Subpart B of 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. Subpart C, Title 10 CFR 52.80 requires that the application must contain the proposed inspections, tests, and analyses, and acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria are met, the facility has been constructed and will be operated in conformity with the combined license, the provisions of the Act, and the Commission's rules and regulations. The COL item of the standard US-EPR DC requires that COL applicant to verify ITAAC for physical protection and identify site specifics ITAAC. Table 14.3-3, Interface Requirements Screening (Page 14-38) addresses ITAAC required for verifying physical protection systems and features providing detection, assessment, delay, and response for protection against the DBT. Site specific ITAAC must include ITA and acceptance criteria to verifying security design, performances, and functions in accordance with the design, and describe ITAAC not addressed by the DC. The site specific ITAAC must describe appropriate ITA and acceptance criteria to verify security performance and functions in accordance with design for closure of ITAAC.

(U) Note: The information addressing specific details related to security features or providing security functions will be safeguards information (SGI) and should be marked and protected in accordance with 10 CFR 73.21. The applicant should portion mark text in the response to request for information (RAI) as appropriate to identify SGI (or Official-Use-Only Security-Related Information) that reveals the specific details of physical protection.

7. **(U)** Part 10, Appendix B, ITTAC, Table 2.4-1 – Security Access Building Inspections, Tests, Analyses, and Acceptance Criteria (Page 1-49): In addition to verifying as-built of the structure of the Security Access Building, indicate the requirement for performing inspections, tests, or analyses required for verifying physical protection systems installation in accordance to detailed design, and verification of physical systems performance for controlling access in accordance with the referenced US-EPR design and COL item for ITAAC addressing interface requirements.

(U) Regulatory Basis: Subpart B of Title 10 CFR (10 CFR) 52, § 52.47, requires that information submitted for a design certification (DC) must include performance requirements and design information sufficiently detailed to permit the preparation of acceptance and inspection requirements by the NRC, and procurement specifications and construction and installation specifications by an applicant. Subpart B of 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. Subpart C, Title 10 CFR 52.80 requires that the application must contain the proposed inspections, tests, and analyses, and acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria are met, the facility has been constructed and will be operated in conformity with the combined license, the provisions of the Act, and the Commission's rules and regulations. Table 14.3.2, "Site Specific SSC ITAAC Screening Summary" identify the Security Access Building a site specific ITAAC. The COL item of the standard US-EPR DC requires that COL applicant to verify ITAAC for physical protection and identify site specifics ITAAC. Table 14.3-3, Interface Requirements Screening (Page 14-38) addresses ITAAC required for verifying physical protection systems and features providing detection, assessment, delay, and response for protection against the DBT. The Security Access Building provides protection against the DBT by detecting and delaying unauthorized access. The Security Access Building and Site specific ITAAC must include ITA and acceptance criteria to verifying security design, performances, and functions in accordance with the detailed design. Standard US-EPR ITAAC, Tier 1, describe required ITA that may be applied to verify physical protection systems providing detection, assessment, and delay for access control.