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SCE&G®
A SCANA COMPANY

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U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

ATTN: Document Control Desk

Subject: Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 Combined License Application (COLA) - Docket Numbers 52-027 and 52-028 Supplemental Response to NRC Request for Additional Information (RAI) Letter No.077 Related to SRP Section 13.6

References:
1. Letter from Denise McGovern (NRC) to Alfred M. Paglia (SCE&G), Request for Additional Information Letter No. 077 Related to SRP Section 13.6 for the Virgil C. Summer Nuclear Station Units 2 and 3 Combined License Application, dated, February 19, 2010.

2. Letter NND-10-0106 from Ron Clary (SCE&G) to Document Control Desk (NRC) dated March 23, 2010, Response to NRC Request for Additional Information (RAI) Letter No. 077 Related to SRP 13.6.

3. Letter ND-10-0886 from Brian L. (Pete) Ivey (Southern Nuclear Operating Company) to Document Control Desk (NRC) dated June 11, 2010, Response to Request for Additional Information Letter No. 047, Supplement 2 Physical Security Inspections, Tests, Analyses, and Acceptance Criteria (PS-ITAAC).

The enclosure to this letter provides supplemental information to the requests for additional information solicited by the NRC in Reference 1. The original responses to these requests were provided in Reference 2 and are supplemented by the information contained in this response. The response provided in Reference 3 provides the R-COLA reply to the same request. The enclosure also identifies any associated changes that will be incorporated in a future revision of the VCSNS Units 2 and 3 COLA. For this response, changes identified in Reference 2 were considered accepted. The enclosure only identifies changes made beyond the original changes.

Should you have any questions, please contact Mr. Al Paglia by telephone at (803) 345-4191, or by email at apaglia@scana.com.

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NRO

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 1st day of July, 2010.

Sincerely,

Ronald B. Clary
Vice President
New Nuclear Deployment

JIG/RBC/jig

Enclosures

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NRC RAI Letter No. 077 Dated February 19, 2010

QUESTIONS for Integrated Security Coordination and Policy Branch (NSIR/DSP/ ISCPB)

SRP Section: 13.6.01 – Physical Security – Combined License

By letter received February 19, 2010, the U.S. Nuclear Regulatory Commission (NRC) provided South Carolina Electric and Gas (SCE&G) with Request for Additional Information (RAI) letter No. 077. RAI letter No. 077 identified a need for additional information required to complete the NRC staff's review of SCE&G Combined License (COL) application Final Safety Analyses Report (FSAR) Section13.6, "Security," and the proposed Physical Security Inspections, Tests, Analyses, and Acceptance Criteria (PS-ITAAC), which were submitted to the NRC for review on April 2, 2009. SCE&G provided responses to the RAI letter No. 077 questions in a letter dated March 23, 2010. Based on NRC feedback provided in a phone call on April 1, 2010, SCE&G is providing a revision to its response to RAI 13.06.01-13, which was provided in the March 23, 2010 letter. This enclosure provides SCE&G's revised response to this RAI. The text that is revised by this response is annotated with a vertical change bar in the right-hand margin of this enclosure.

This revised response addresses NRC staff comments by incorporating changes to COLA Part 10, Table 2.6.9-2, for ITAAC 4 regarding intrusion detection and assessment equipment, and 8.b) regarding unattended openings that intersect the protected area boundary or vital area boundary.

NRC RAI Number: 13.06.01-13

ITAAC # 1
VCSNS Units 2 and 3, S-COL application revision 1, Part 10, Proposed License Conditions (including Inspection, Testing, Analyses, and Acceptance Criteria (ITAAC), addresses the Westinghouse Design Control Document (DCD), Tier 1, Table 2.6.9-1, revision 17, as providing specifies design commitments and ITAAC for the physical security system to be used as VCSNS's alternative method to the SRP 14.3.12, Physical Security Hardware-ITAAC. The Westinghouse DCD is being revised to address the new Part 73.55 rule requirements. Review and confirm each ITAAC listed below to verify that it properly reflects the licensees intentions as an alternative to the SRP based on the most current revision of the DCD. Verify and provide the status of any COL action items assigned. What action will the Licensee take to revise ITAAC to reflect the final DCD?

The below ITAAC reference numbers from DCD, Tier 1 Table 2.6.9-1,have been cross-referenced with NUREG-800 Standard Review Plan (SRP) 14.3.12 Appendix "A" for clarification.

DCD Table 2.6.9-1 # 1 SRP Appendix "A" #6

DCD Table 2.6.9-1 # 2	SRP Appendix "A" #2b
DCD Table 2.6.9-1 # 3	SRP Appendix "A" #12
DCD Table 2.6.9-1 # 4	SRP Appendix "A" #10
DCD Table 2.6.9-1 # 5	SRP Appendix "A" #11a
DCD Table 2.6.9-1 # 6	SRP Appendix "A" #7
DCD Table 2.6.9-1 # 7a	SRP Appendix "A" #1a
DCD Table 2.6.9-1 # 7b	SRP Appendix "A" #1b
DCD Table 2.6.9-1 # 8	SRP Appendix "A" #5
DCD Table 2.6.9-1 # 9	SRP Appendix "A" #15
DCD Table 2.6.9-1 # 10	SRP Appendix "A" #4a
DCD Table 2.6.9-1 # 11	SRP Appendix "A" #9
DCD Table 2.6.9-1 # 12	SRP Appendix "A" #8 a & b
DCD Table 2.6.9-1 # 13	SRP Appendix "A" #16 a & b
DCD Table 2.6.9-1 # 14	SRP Appendix "A" #3 a & b
DCD Table 2.6.9-1 # 15	SRP Appendix "A" #13 a
DCD Table 2.6.9-1 # 16	SRP Appendix "A" #14

Regulatory Basis: 10CFR 52.47(b)(1) The application must also contain: (1) The proposed inspections, tests, 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 met, a facility that incorporates the design certification has been constructed and will be operated in conformity with the design certification, the provisions of the Act, and the Commission's rules and regulations.

VCSNS RESPONSE:

By letter dated June 4, 2009, Westinghouse Electric Company (Westinghouse) submitted the inspections, tests, analyses, and acceptance criteria (ITAAC) related to the physical security design commitments within the scope of the AP1000 design certification. The corresponding physical security ITAAC (PS-ITAAC) related to the AP1000 reference combined license application (R-COLA) were provided by Southern Nuclear Operating Company (SNC) in a letter dated March 23, 2009. The AP1000 R-COLA PS-ITAAC were incorporated into COLA Part 10, Proposed License Conditions (including ITAAC), Appendix B, new Table 2.6.9-2, "Site-Specific Physical Security Inspections, Tests, Analyses, and Acceptance Criteria." On December 16, 2009, Westinghouse submitted a revision to the AP1000 design certification security ITAAC, based on a draft to Revision 1 of Standard Review Plan section 14.3.12, Revision 1, "Physical Security Hardware – Inspections, Tests, Analyses, and Acceptance Criteria," which is being revised to address the revised 10 CFR 73.55.

An assessment of the AP1000 security ITAAC and the COLA PS-ITAAC identified several changes that are required to the COLA PS-ITAAC to address the 10 CFR 73.55 criteria that are within the scope of the AP1000 combined license applicants. Using the ITAAC in draft Revision 1 to SRP 14.3.12, dated February 9, 2010, as guidance, the

PS-ITAAC in COLA Part 10, Table 2.6.9-2, will be revised to complement the AP1000 security ITAAC, thereby fully addressing the revised 10 CFR 73.55. These revised COLA PS-ITAAC provided below address the new 10 CFR 73.55 requirements, and account for the revised AP1000 design certification security ITAAC that were provided in Westinghouse's December 16, 2009 letter. These revised COLA PS-ITAAC will replace the current PS-ITAAC in COLA Part 10, Table 2.6.9-2 in a future revision of the COLA.

The December 16, 2009 response to RAI-SRP 14.3.12-NSIR-07 also changed Combined License Information Item 13.6.1 to require Combined License applicants to address site-specific security ITAACs, as applicable. A change to FSAR Section 13.6 will include a reference to FSAR Section 14.3.2.3.2 in response to this COL Information Item.

A future revision to the COLA will reflect the changes discussed in this response.

This response is identical to the SNC response to RAI 14.03.12-1 located in SNC letter ND-10-0886 dated June 11, 2010 with the exception of the discussion regarding an attached table comparing the draft SRP 14.3.12 ITAAC to the AP1000 design certification ITAAC and the revised COLA PS-ITAAC, which though not discussed in this SCE&G letter, is also applicable for the VCSNS Units 2 and 3 COLA.

ASSOCIATED VCSNS COLA REVISIONS:

1. COLA Part 2, FSAR, Subsection 13.6.1, Combined License Information Item, will be revised as follows:
   [Reviewer's Note: The current left-margin annotation (LMA), STD COL 13.6-1, applies to both sentences.]

   Information for the Security Plan portion of this COL item is addressed in Section 13.6.

   Information for the Physical Security ITAAC portion of this COL item is addressed in Section 14.3.2.3.2.

2. COLA Part 2, FSAR, Subsection 14.3.2.3.2, Physical Security ITAAC (PS-ITAAC), will be revised as follows:
   [Reviewer's Note: A new left-margin annotation (LMA) STD COL 13.6-1 will be applied to this paragraph. The current LMA, STD SUP 14.3-1, applies only to Subsection 14.3.2.3.3, Other Site-Specific Systems.]

   Generic PS-ITAAC have been developed in a coordinated effort between the NRC and the Nuclear Energy Institute (NEI). These generic ITAAC have been tailored to the AP1000 design and site-specific security requirements. ~~Information for the Security Plan portion of this COL item is addressed in Section 13.6.~~

3. COLA Part 10, Proposed License Conditions and ITAAC, Appendix B, Inspections, Tests, Analysis, and Acceptance Criteria, Table 2.6.9-2 will be revised as follows:

Design Commitment	Inspections, Test, and Analyses	Acceptance Criteria
1. The external walls, doors, ceiling, and floors in the location within which the last access control function for access to the protected area is performed are bullet resistant to at least Underwriters Laboratory Ballistic Standard 752, level 4.	Type test, analysis, or a combination of type test and analysis will be performed for the external walls, doors, ceilings, and floors in the location within which the last access control function for access to the protected area is performed.	The external walls, doors, ceilings, and floors in the location within which the last access control function for access to the protected area is performed are bullet-resistant to at least Underwriter's Laboratory Ballistic Standard 752, level 4.

Design Commitment	Inspections, Test, and Analyses	Acceptance Criteria
2. Physical barriers for the protected area perimeter are not part of vital area barriers.	An inspection of the protected area perimeter barrier will be performed.	Physical barriers at the perimeter of the protected area are separated from any other barrier designated as a vital area barrier.
3.a) Isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area that allow 20 feet of observation on either side of the barrier. Where permanent buildings do not allow a 20 foot observation distance on the inside of the protected area, the building walls are immediately adjacent to, or an integral part of, the protected area barrier.	Inspections will be performed of the isolation zones in outdoor areas adjacent to the physical barrier at the perimeter of the protected area.	Isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area and allow 20 feet of observation and assessment of the activities of people on either side of the barrier. Where permanent buildings do not allow a 20 foot observation and assessment distance on the inside of the protected area, the building walls are immediately adjacent to, or an integral part of, the protected area barrier and the 20 foot observation and assessment distance does not apply.
b) The isolation zones are monitored with intrusion detection equipment that provides the capability to detect and assess unauthorized persons.	Inspections will be performed of the intrusion detection equipment within the isolation zones.	The isolation zones are equipped with intrusion detection equipment that provides the capability to detect and assess unauthorized persons.

Design Commitment	Inspections, Test, and Analyses	Acceptance Criteria
4. The intrusion detection and assessment equipment ~~system~~ at the protected area perimeter: a) detects penetration or attempted penetration of the protected area barrier and concurrently alarms in both the Central Alarm Station and Secondary Alarm Station, and b) remains operable from an uninterruptible power supply in the event of the loss of normal power.	Tests, inspections or a combination of tests and inspections of the intrusion detection and assessment equipment~~system~~ at the protected area perimeter and its uninterruptible power supply will be performed.	The intrusion detection and assessment equipment ~~system~~ at the protected area perimeter: a) detects penetration or attempted penetration of the protected area barrier and concurrently alarms in the Central Alarm Station and Secondary Alarm Station, and b) remains operable from an uninterruptible power supply in the event of the loss of normal power.
5. Access control points are established to: a) control personnel and vehicle access into the protected area. b) detect firearms, explosives, and incendiary devices at the protected area personnel access points.	Tests, inspections, or combination of tests and inspections of installed systems and equipment at the access control points to the protected area will be performed.	The access control points for the protected area: a) are configured to control personnel and vehicle access. b) include detection equipment that is capable of detecting firearms, incendiary devices, and explosives at the protected area personnel access points.
6. An access control system with numbered picture badges is installed for use by individuals who are authorized access to protected areas and vital areas without escort.	A test of the access control system with numbered picture badges will be performed.	The access authorization system with numbered picture badges can identify and authorize protected area and vital area access only to those personnel with unescorted access authorization.
7. Access to vital equipment physical barriers requires passage through the protected area perimeter barrier.	Inspection will be performed to confirm that access to vital equipment physical barriers requires passage through the protected area perimeter barrier.	Vital equipment is located within a protected area such that access to vital equipment physical barriers requires passage through the protected area perimeter barrier.

Design Commitment	Inspections, Test, and Analyses	Acceptance Criteria
8.a) Penetrations through the protected area barrier are secured and monitored.	Inspections will be performed of penetrations through the protected area barrier.	Penetrations and openings through the protected area barrier are secured and monitored.
8.b) Unattended openings (such as underground pathways) that intersect the protected area boundary or vital area boundary will be protected by a physical barrier and monitored by intrusion detection equipment or provided surveillance at a frequency sufficient to detect exploitation.	Inspections will be performed of unattended openings ~~within~~that intersect the protected area boundary or vital area boundary.	Unattended openings (such as underground pathways) that intersect the protected area ~~barrier~~boundary or vital area boundary are protected by a physical barrier and monitored by intrusion detection equipment or provided surveillance at a frequency sufficient to detect exploitation.
9. Emergency exits through the protected area perimeter are alarmed and secured with locking devices to allow for emergency egress.	Tests, inspections, or a combination of tests and inspections of emergency exits through the protected area perimeter will be performed.	Emergency exits through the protected area perimeter are alarmed and secured by locking devices that allow prompt egress during an emergency.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None