

## HarrisRAIsPEm Resource

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**From:** Misenhimer, David  
**Sent:** Friday, May 13, 2011 5:08 PM  
**To:** HarrisRAIsPEm Resource  
**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 079 RELATED TO SRP SECTION: 13.06 - PHYSICAL SECURITY FOR THE SHEARON HARRIS UNITS 2 AND 3 COMBINED LICENSE APPLICATION  
**Attachments:** Cover Letter 79 RAI 4013, 4737, 4738, 5628, 5629.docx

**Hearing Identifier:** HarrisCOL\_eRAIs  
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**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 079 RELATED TO  
SRP SECTION: 13.06 - PHYSICAL SECURITY FOR THE SHEARON HARRIS UNITS 2 AND 3  
COMBINED LICENSE APPLICATION

**Sent Date:** 5/13/2011 5:08:24 PM

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**From:** Misenhimer, David

**Created By:** David.Misenhimer@nrc.gov

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May 13, 2011

Mr. John Elnitsky  
Vice President, Nuclear Plant Development  
Progress Energy Carolinas, Inc.  
P.O. Box 14042  
Saint Petersburg, FL 33733

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 079 RELATED TO  
SRP SECTION: 13.06 - PHYSICAL SECURITY FOR THE SHEARON HARRIS  
UNITS 2 AND 3 COMBINED LICENSE APPLICATION

Dear Mr. Elnitsky:

By letter dated February 18, 2008, Progress Energy submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advanced passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, you may contact me at 301-415-6590, or you may contact me at 301-415-6590.

Sincerely,

David Misenhimer, Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-022  
52-023

eRAI Tracking No: 4013, 4737, 4738, 5628, 5629

Enclosure:  
Request for Additional Information

Mr. Hastings

- 2 -

If you have any questions or comments concerning this matter, you may contact me at 301-415-6590, or you may contact me at 301-415-6590.

Sincerely,

David Misenhimer, Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-022  
52-023

eRAI Tracking No: 4013, 4737, 4738, 5628, 5629

Enclosure:  
Request for Additional Information

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**NRO-002**

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NAME	DHuyck*	DMisenhimer*	BHughes*
DATE	03/25/2011	04/04/2011	04/04/2011

\*Approval captured electronically in the electronic RAI system.

**OFFICIAL RECORD**

## Request for Additional Information No. 4013

Shearon Harris  
Progress Energy Carolinas, Inc.  
Docket No. 52-022 and 52-023  
SRP Section: 13.06.01 - Physical Security - Combined License  
Application Section: Part 8, Physical Security Plan

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

#### 13.06.01-1

Physical Security Plan, Revision 1, Page 1, Section 1.1, The referenced Appendix D is not of sufficient size/magnification or detail to clearly identify or discern the appropriate information. The NRC staff requests that the applicant provide the referenced Appendix D of sufficient detail to clearly identify or discern the appropriate information such as OCA boundary, PA perimeter boundary, Vehicle Barrier System (to include natural terrain features), transportation routes (e.g., rail, roads and water etc.) described in this section.

**Regulatory Basis:** 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.

#### 13.06.01-2

Physical Security Plan, Revision 1, Pages 1 & 2, Section 1.1. This section does not describe or confirm that consideration was given to railroad /spur, airports, pipelines, hazardous material facilities and pertinent environmental features (i.e., flat or mountainous topography, wooded or grass land) that may have an effect upon coordination of response activities. Describe in detail how these features are considered. Consider adding this additional information to figure 2 & 3. Also provide additional detail on the "Red Zone Fence" as described in AP 1000 Safeguards Report (Westinghouse TR APP-GW-GLR-066), and consider adding to Appendix A, figure 1, and Appendix C, Section-8.

**Regulatory Basis:** 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.

#### 13.06.01-3

Physical Security Plan, Revision 1, Page 4, Section 4.1, paragraph 4. This section states in part, "The Security Shift Supervisor (or designee) is responsible for ensuring security force personnel assigned to their shift perform their duties..." Since the Term "or designee" is not included in the black text area of NEI 03-12. Clarify what position within section 4.1 of the PSP will be filled with this position. Clarify who may fill this position and the requirements for acting as *designee*.

**Regulatory Basis:** 10 CFR 73.55(d)(2)(ii). At least one member, onsite and available at all times, who has the authority to direct the activities of the security organization and who is assigned no other duties that would interfere with this individual's ability to perform these duties in accordance with the security plans and the licensee protective strategy.

**13.06.01-4**

Physical Security Plan, Revision 1, Page 5, Section 4.1, 4th paragraph. states in part, "At least one full time member of the security force, the Security Shift Supervisor or Sergeant qualified as a Security Shift Supervisor, has the authority to direct the security forces and is on site at all times." The term Sergeant is not defined in Section 4 of the PSP, Appendix A, Appendix B Critical Task Matrix, or Appendix C, Section 4.5 and 4.6. Clarify whether this is an actual position within the security force organization. Describe what duty position the Sergeant fulfills as listed in Appendix B Training and Qualification Plan, Table 1, and Appendix C section.

**Regulatory Basis:** 10 CFR 73.55(c)(7)(ii). Implementing procedures must document the structure of the security organization and detail the types of duties, responsibilities, actions, and decisions to be performed or made by each position of the security organization. 10 CFR 73.55(d)(2)(ii). The security organization must include at least one member, onsite and available at all times, who has the authority to direct the activities of the security organization and who is assigned no other duties that would interfere with this individual's ability to perform these duties in accordance with the security plans and the licensee protective strategy.

**13.06.01-5**

Physical Security Plan, Revision 1, Page 6, Section 8. As described in NEI 03-12, rev #6, provide additional information on response protocols for other response organizations and documentation for current agreements with law enforcement agencies.

**Regulatory Basis:** 10 CFR 73.55(k)(9). Law enforcement liaison. To the extent practicable, licensees shall document and maintain current agreements with applicable law enforcement agencies to include estimated response times and capabilities.

**13.06.01-6**

Physical Security Plan, Revision 1, Page 8, Section 11.2.1.2. Provide additional description of natural terrain features that make-up portions of the outer VBS and provide reference to the criteria used to determine its acceptability and stand-off distances. Explain the process to development the VBS and guidance for the design. (RG 5.76 or NUREG 6190). Explain that stand-off distance for Units 2 & 3 has been analyzed to ensure there are no negative effects on the equipment needed for Units 1. This additional information should be incorporated in the Facility Physical Layout Drawing.

**Regulatory Basis:** 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. 10 CFR 73.55(e)(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.

### 13.06.01-7

Physical Security Plan, Revision 1, Page 11 and 12, Section 11.2.2.2, Paragraphs 1 and 5, describe the location of secondary power for active vehicle barriers, how this back-up power source is protected to ensure availability when needed.

### R-COLA question 3394, 13.06-12

**Regulatory Basis:** 10 CFR 73.55(e)(10)(i)(B). Licensees shall periodically check the operation of active vehicle barriers and provide a secondary power source, or a means of mechanical or manual operation in the event of a power failure, to ensure that the active barrier can be placed in the denial position to prevent unauthorized vehicle access beyond the required standoff distance.

### 13.06.01-8

Physical Security Plan, Revision 1, Page 14, Section 11.3. Describe the measures taken at the Plant Entry Building to ensure that detection, assessment, observation, and surveillance requirements of 10 CFR 73.55 are met and appropriate barriers are installed to prevent potential exploitation of structures/buildings whose walls and roofs comprise a portion of the PA.

**Regulatory Basis:** 10 CFR 73.55(e)(8)(iv). Where building walls or roofs comprise a portion of the protected area perimeter barrier, an isolation zone is not necessary provided that the detection and, assessment requirements of this section are met, appropriate barriers are installed, and the area is described in the security plans. 10 CFR 73.55(e)(8)(ii). Penetrations through the protected area barrier must be secured and monitored in a manner that prevents or delays, and detects the exploitation of any penetration. 10 CFR 73.55(e)(7)(ii). Obstructions that could prevent the licensee's capability to meet the observation and assessment requirements of this section must be located outside of the isolation zone.

### 13.06.01-9

Physical Security Plan, Revision 1, Page 15, Section 11.3. Describe which of the three options identified is or will be established to prevent an unauthorized train from penetrating the protected area boundary. Also describe the frequency of surveillance measures, and the implementing process.

### R-COLA Question 3395, 13.06-3

**Regulatory Basis:** 10 CFR 73.55(e)(10)(i)(D). Licensees shall, 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.

### 13.06.01-10

Physical Security Plan, Revision 1, Section 14.5, does not appear to describe how the minimum vital areas and equipment are protected. Please clarify how the minimum vital areas and equipment are protected, including any proposed revision to this section of the security plan.

### R-COLA Question 3394, 13.06-19

**Regulatory Basis:** 10 CFR 73.55(e)(9)(v). At a minimum, the following shall be considered vital areas: (A) The reactor control room; (B) The spent fuel pool; (C) The central alarm station; and (D) The secondary alarm station in accordance with 73.55(i)(4)(iii).

10 CFR 73.55(e)(9)(vi). At a minimum, the following shall be located within a vital area: (A) The secondary power supply systems for alarm annunciation equipment; and (B) The secondary power supply systems for non-portable communications equipment.

**13.06.01-11**

Physical Security Plan, Revision 1, Appendix B, Training and Qualification Plan, Page B-4, Section 2.4, last paragraph. Provide a general description of the physical fitness test and how it demonstrates strength, endurance and agility, as outlined in NEI 03-12.

**Regulatory Basis:** 10 CFR Part 73, Appendix B, Section II, paragraph B.4.b(3). The physical fitness test must include physical attributes and performance objectives which demonstrate the strength, endurance, and agility, consistent with assigned duties in the Commission-approved security plans, licensee protective strategy, and implementing procedures during normal and emergency conditions.

**13.06.01-12**

Physical Security Plan, Revision 1, Appendix B, Training and Qualification Plan, Page B17, Table 1, task 15 is identified as being performed by watch personnel. Provide clarification that demonstrates a timely response and interdiction for completion of this task by watch personnel.

**R-COLA Question 3391, 13.06-11**

**Regulatory Basis:** Title 10 CFR 73.55(K)(8)(ii) Initiate response actions to interdict and neutralize the threat in accordance with the requirements of part 73, appendix C, section II, the safeguards contingency plan, and the licensee's response strategy. Appendix C to part 73 A (4) The responses should be timely, and include personnel who are trained and qualified to respond in accordance with a documented training and qualification program.

**13.06.01-13**

Physical Security Plan, Revision 1, Appendix C, Safeguards Contingency Plan, Page C-19, Section 4.2. Site maps (Figures) do not clearly identify necessary information and Section 1.1 of PSP does not clearly identify/describe the required site-specific physical layout. Please provide a detailed Appendix D site maps (Figures) which clearly identify necessary information and in addition identify/describe the required site-specific physical layout. Also ensure that PSP Section 1.1 and SCP Section 4.2 are in alignment.

**R-COLA Question 4140, 13.06-28**

**Regulatory Basis:** 10 CFR Part 73, Appendix C, Section II, Paragraph B.3.b. "Physical Layout". The safeguards contingency plan must include a site map depicting the physical structures located on the site, including onsite independent spent fuel storage installations, and a description of the structures depicted on the map. 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. 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.

**13.06.01-14**

Physical Security Plan, Revision 1, Section 15.3, Page 28, does not appear to include the secondary power supply systems location. Please describe the secondary power supply systems location, or justify its exclusion.



## R-COLA Question 13.06-20

**Regulatory Basis:** 10 CFR 73.55(e)(9)(v). At a minimum, the following shall be considered vital areas: (A) The reactor control room; (B) The spent fuel pool; (C) The central alarm station; and (D) The secondary alarm station in accordance with § 73.55(i)(4)(iii).

10 CFR 73.55(e)(9)(vi) At a minimum, the following shall be located within a vital area: (A) The secondary power supply systems for alarm annunciation equipment; and (B) The secondary power supply systems for non-portable communications equipment.

### 13.06.01-15

Physical Security Plan, Revision 1, Section 15.4, Page 28 and Appendix C, Safeguards Contingency Plan, Section 1.3, page C-1. Provide clarification on the duties, responsibilities and training requirements for Nuclear Shift Manager. This position does not appear to be listed in Section 4.1, Appendix B, Training and Qualification Plan, Table 1, or Appendix C, Safeguards Contingency Plan, Section 4.1.1, Page C-17, and Section 4.1.2, page C-18.

**Regulatory Basis:** 10 CFR 73.55(d)(2)(ii). At least one member, onsite and available at all times, who has the authority to direct the activities of the security organization and who is assigned no other duties that would interfere with this individual's ability to perform these duties in accordance with the security plans and the licensee protective strategy.

### 13.06.01-16

Physical Security Plan, Revision 1, Page vii. Table of Contents does not appear to follow the NEI 03-12 Template. Provide the additional information to include a reference and page number location for Table 1- Critical Task Matrix, or justify its exclusion.

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

### 13.06.01-17

Physical Security Plan, Revision 1, Section 15.3. Page 22. Revise your design intent for the Intrusion Detection Equipment description to ensure you address the 10 CFR 73.55(e)(7)(i) and SRP 14.3.12, Physical Security Hardware-ITAAC, Number 4a.

**Regulatory Basis:** 10 CFR 73.55(e)(9)(v). At a minimum, the following shall be considered vital areas: (A) The reactor control room; (B) The spent fuel pool; (C) The central alarm station; and (D) The secondary alarm station in accordance with § 73.55(i)(4)(iii).

10 CFR 73.55(e)(9)(vi) At a minimum, the following shall be located within a vital area: (A) The secondary power supply systems for alarm annunciation equipment; and (B) The secondary power supply systems for non-portable communications equipment.

**Request for Additional Information No. 4737**

**Shearon Harris  
Progress Energy Carolinas, Inc.  
Docket No. 52-022 and 52-023  
SRP Section: 13.06 - Physical Security  
Application Section: Part 8, Physical Security Plan**

**QUESTIONS for Reactor Security and Programs Branch (NSIR/DRP/RSPLB)**

**13.06-1**

General Comment, Part 8, Physical Security Plan, Section 2, Performance Objectives (Page 2), and Section 17, Review, Evaluation and Audit of the Physical Security Program: Describe how the requirements of 10 CFR 73.58 for managing safety/security interface will be met. Provide descriptions in the FSAR (i.e., Part 2) that describe how plant management controls and process will be applied to meet 10 CFR 73.58 to manage the safety/security for the Harris Nuclear Site, Units 2 and 3.

**R-COLA Question 4687, 13.06-36**

**Regulatory Basis:** Subpart C of Title 10 CFR (10 CFR) 52, § 52.79(a)(35)(i) and (ii) requires that information submitted for combined license (COL) applications include how the applicant will meet the requirements of 10 CFR 73. Title 10 CFR 52.6, Completeness and accuracy of information, requires information provided “shall be complete and accurate in all material respects.” Title 10 CFR 73.58 states that each licensee shall assess and manage the potential for adverse effects on safety and security, including the site emergency plan, before implementing changes to plant configurations, facility conditions, or security. The application did not include descriptions, in any parts of the application, on how plant management controls and processes will address the management of safety/security interface to meet requirements of 10 CFR 73.58. The applicant's description for the management of safety/security interface indicated in Part 8, Section 17, Review, Evaluation and Audit of the Physical Security Program, did not adequately address how applicant will manage and plan to implement safety/security interface in accordance with regulatory requirements. Section 17 only addressed reviews and audits of program no longer than 12 months after changes. The descriptions of how the applicant will apply plant's management controls and processes to provide assurance that safety/security interface will be adequately managed should not be described in Part 8 security plans. Security plan should reference the requirements described in the FSAR for completeness.

**13.06-2**

Physical Security Plan, Revision 1, (Harris Advance Reactor Units (HAR) 2 & 3) Section 18, details the minimum number of armed responders continuously in the protected area. Explain how this number correlates with the expected number detailed in Westinghouse Technical Report (TR) 94, AP1000 Safeguards Assessment Report revision 5:

Assuming that the applicant will have only one person that fulfills the primary and secondary responsibility of DCD responder # 11 (page 22 of TR 94) for the two units. Provide further detail regarding how the secondary responsibility will be fulfilled in the opposite unit as the single (assumed) individual that has the primary and secondary responsibility of responder # 11.

If applicant has two individuals (one in each unit) that will be available to fulfill the primary and secondary responsibilities of DCD responder # 11, explain whether these two individuals are included in the commitments in PSP Section 18 consistent with the site response strategy in the AP1000 Safeguards Assessment Report, which is incorporated by reference.

If applicant has only one individual (in one unit) that will be available to fulfill the primary and secondary responsibilities of DCD responder # 11, explain whether another individual would be stationed at the opposite unit to fulfill the secondary responsibility of responder #11. If so, describe in section 18 of the PSP whether this additional individual would be required to meet the response requirements stated in the site response strategy in the AP1000 Safeguards Assessment Report, which is incorporated by reference.

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 Westinghouse Technical Report (TR) 94, AP1000 Safeguards Assessment Report revision 5, section 5.2.2, all personnel listed on page 22 with the exception of the CAS and SAS officers (#7 and #12).

**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.

**Request for Additional Information No. 4738**

**Shearon Harris  
Progress Energy Carolinas, Inc.  
Docket No. 52-022 and 52-023**

**SRP Section: 14.03.12 - Physical Security Hardware - Inspections, Tests, Analyses, and  
Acceptance Criteria**

**Application Section: Part 10, Physical Security Hardware**

**QUESTIONS for Reactor Security and Programs Branch (NSIR/DRP/RSPLB)**

**14.03.12-1**

Shearon Harris Units # 2 & 3, S-COL application revision 2, 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 specific design commitments and ITAAC for the physical security system to be used as Shearon Harris'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 applicant's 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 applicant 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, Revision 1, May 2010, Appendix "A" for clarification. (ADAMS Accession Number: ML109970568).

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

**R-COLA Question 14.03.12-1**

**Regulatory Basis:** 10 CFR 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.

#### **14.03.12-2**

Shearon Harris Units # 2 & 3, S-COL application revision 2, Part 10, Proposed License Conditions (including Inspection, Testing, Analyses, and Acceptance Criteria (ITAAC)), Table 2.6.9-2 specifies that the design commitments and ITAAC for the physical security system that are outside the scope of the Westinghouse AP1000 DCD Tier 1 are to be used as your alternative method to the SRP Physical Security-ITAAC. Review and confirm each ITAAC listed below to verify that it properly reflects the applicant's intentions as an alternative to the SRP based on the most current revision of the S-COL application revision 2, Part 10 Table 2.6.9-2. What action will the applicant take to revise ITAAC to reflect the final S-COL application, Part 10 Table 2.6.9-2?

The below ITAAC reference numbers from Part 10, Table 2.6.9-2, have been cross-referenced with NUREG-800 Standard Review Plan (SRP) 14.3.12, Revision 1, May 2010, Appendix "A" for clarification. (ADAMS Accession Number: ML100970568).

- Part 10, Table 2.6.9-2 # 1 SRP Appendix "A" # 6 (Last Access Control)
- Part 10, Table 2.6.9-2 # 2 SRP Appendix "A" #2a
- Part 10, Table 2.6.9-2 # 3 SRP Appendix "A" #3a
- Part 10, Table 2.6.9-2 # 3 SRP Appendix "A" #3c
- Part 10, Table 2.6.9-2 # 4 SRP Appendix "A" #4a
- Part 10, Table 2.6.9-2 # 5 SRP Appendix "A" #8a (Added in SRP 14.3.12, Revision 1)
- Part 10, Table 2.6.9-2 # 5 SRP Appendix "A" #8b
- Part 10, Table 2.6.9-2 # 6 SRP Appendix "A" #9

#### **R-COLA Question 14.03.12-1**

**Regulatory Basis:** 10 CFR 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.

#### **14.03.12-3**

Neither Shearon Harris Units 2 & 3, S-COL application revision 2, Part 10, Proposed License Conditions (including ITAAC), Table 2.6.9-2 nor Westinghouse Design Control Document (DCD), Tier 1 revision 17, Table 2.6.9-1, addresses several of the new Part 73.55 rule requirements. Explain how Progress Energy Carolinas, Inc. will address these ITAAC areas. Identify and justify any differences between the design features, analytical techniques, and procedural measures proposed for the Harris facility and the SRP acceptance criteria and evaluate how the proposed alternatives to the SRP acceptance criteria provide acceptable methods of compliance with the NRC regulations.

The below listed Physical Security ITAAC reference numbers are from the NUREG-800 Standard Review Plan (SRP) 14.3.12, Revision 1, May 2010, appendix "A" for clarification (ADAMS Accession Number: ML100970568).

SRP Appendix "A" #2b  
SRP Appendix "A" #2c  
SRP Appendix "A" #3b  
SRP Appendix "A" #4c  
SRP Appendix "A" #11c (Added in SRP 14.3.12, Revision 1)

**R-COLA Question 14.03.12-1**

**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.

**Request for Additional Information No. 5628**

**Shearon Harris  
Progress Energy Carolinas, Inc.  
Docket No. 52-022 and 52-023  
SRP Section: 13.06.01 - Physical Security - Combined License  
Application Section: Part 8, Physical Security Plan**

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

**13.06.01-18**

Physical Security Plan, Revision 1, makes reference to over 61 Facility/Site Procedures, plans, implemented Controls, and Letter of agreement. Please describe the process that is being used to track the development of these documents and their implementation.

**R-COLA Question 3384, 13.06-1**

**Regulatory Basis:** 10 CFR 73.55(a)(3) The licensee is responsible for maintaining the onsite physical protection program in accordance with Commission regulations through the implementation of security plans and written security implementing procedures.

10 CFR 73.55(a)(4). Applicants for an operating license under the provisions of part 50 of this chapter or holders of a combined license under the provisions of part 52 of this chapter, shall implement the requirements of this section before fuel is allowed onsite (protected area).

**13.06.01-19**

Physical Security Plan, Revision 1, Section 15.4, clarify the relationship between this video assessment equipment and the fixed and non-fixed cameras and surveillance systems equipment identified in Sections 15.1 and 15.2 of the PSP. Describe how the real time video play-back recorder captures activities before and after each alarm annunciation.

**R-COLA Question 3384, 1306-5**

**Regulatory Basis:** 10 CFR 73.55(i)(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.

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.

10 CFR 73.55(e)(7)(i) An isolation zone must be maintained in outdoor areas adjacent to the protected area perimeter barrier. The isolation zone shall be:

(C) Monitored with assessment equipment designed to satisfy the requirements of § 73.55(i) and provide real-time and play-back/recorded video images of the detected activities before and after each alarm annunciation.

**13.06.01-20**

Physical Security Plan, Revision 1, Section 14.1 contains a commitment to adopting Regulatory Guide 5.66. Section C in revision 1 of RG 5.66 states:

“Licensees who adopt this regulatory guide should include the following statement in their physical security plans:

All elements of Regulatory Guide 5.66, Revision 1, have been implemented to satisfy the requirements of 10 CFR 73.56 and 10 CFR Part 26 related to unescorted access and unescorted access authorization.”

The PSP does not appear to contain the above statement. Please provide this additional information, or justify its exclusion.

**R-COLA Question 3396,13.06-17**

**Regulatory Basis:** 10 CFR 73.55(b) (7) The licensee shall establish, maintain, and implement an access authorization program in accordance with § 73.56 and shall describe the program in the Physical Security Plan.

**13.06.01-21**

Physical Security Plan, Revision 1, Section 14.2, does not appear to address the methodology and frequency chosen to monitor and/or patrol the spent fuel pool. Please address the methodology and frequency chosen to monitor and/or patrol the spent fuel pool including proposed alternative measures, if applicable.

**R-COLA Question 3396,13.06-18**

**Regulatory Basis:** 10 CFR 73.55(i)(5)(v) Armed security patrols shall periodically inspect vital areas to include the physical barriers used at all vital area portals.

**13.06.01-22**

Physical Security Plan, Revision 1, Appendix C, Safeguards Contingency Plan, Section 4.2. Page C-28. The level of detail identified in this section is inconsistent with the referenced section 1.1, and figures 1, NRC staff requests the plan and maps be updated to reflect the necessary information.

**R-COLA Question 4140, 13.06-28:**

**Regulatory Basis:** 10 CFR 73.55, Appendix C Section II, Paragraph B(3)(b). Plans must also include a description and map of the site in relation to nearby town, transportation routes (e.g., rail, water and roads) pipelines, airports, towns, hazardous material facilities, and pertinent environmental features that may have an effect upon coordination of response activities.

**13.06.01-23**

Physical Security Plan, Revision 1, Enclosure 2 (Erratum: Variances to Generic Guidance Provided by March 18, 2009 version of NEI 03-12, Rev. 6) letter addresses nine (9) changes, three (3) of which were not addressed. Provide clarification on the status of these changes since they were not address in Physical Security Plan, (revision 2).



Page 2, Item # 1, Table of Content Page vi, Figures information is addressed as being relocated to Appendix E. This change is not reflected in the TOC, Physical Security Plan, (revision 2).

Page 2, items # 2, Section 13.2.1, this editorial change was not addressed.

Page 3, item # 8, App. C, Subsection 5.4, deleted this information from the security plan section 5.4, page C-21. This change is not reflected in the security plan section 5.4, page C-21.

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

#### **13.06.01-24**

Physical Security Plan, Revision 1, Appendix B, T&QP, Page B-11, Section 3.6.4, clarify the reasoning to delete Task 26 from Table 1: Critical Task Matrix and still require a qualification score as listed in section 3.6.4 bullets one and two. Also consider renumbering section "Courses of Fire to 3.6.4.1, and "Firearms Requalification to 3.6.5 to remain consistence with NEI 03-12, rev. 6 Template.

**Regulatory Basis:** 10 CFR 73.55 (d)(3): The licensee may not permit any individual to implement any part of the physical protection program unless the individual has been trained, equipped, and qualified to perform their assigned duties and responsibilities in accordance with appendix B to this part and the Training and Qualification Plan.

#### **13.06.01-25**

Physical Security Plan, Revision 1, Appendix A, T&QP, Page B-15, Table 1: Critical Task Matrix, is unclear as to what tasks are required for the Security Shift Supervisor, since all the tasks listed are contained in bracked text. Also claify what tasks are required for "designee" and "Sergeant" (terms from PSP Section 4.1)

**Regulatory Basis:** 10 CFR 73.55 (d)(3): The licensee may not permit any individual to implement any part of the physical protection program unless the individual has been trained, equipped, and qualified to perform their assigned duties and responsibilities in accordance with appendix B to this part and the Training and Qualification Plan.

#### **13.06.01-26**

Physical Security Plan, Revision 1, Section 15.4, please clarify the relationship between this video assessment equipment and the fixed and non-fixed cameras and surveillance systems equipment identified in Sections 15.1 and 15.2 of the PSP. Describe how the real time video play-back recorder captures activities before and after each alarm annunciation.

#### **R-COLA Question 3384 1306-5**

**Regulatory Basis:** 10 CFR 73.55(i)(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.

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.

10 CFR 73.55(e)(7)(i) An isolation zone must be maintained in outdoor areas adjacent to the protected area perimeter barrier. The isolation zone shall be: (C) Monitored with assessment equipment designed to satisfy the requirements of § 73.55(i) and provide real-time and play-back/recorded video images of the detected activities before and after each alarm annunciation.

### **13.06.01-27**

Physical Security Plan, Revision 1, Section 11.4 does not appear to describe if the secondary alarm station shall be equal and redundant. Please clarify whether the secondary alarm station shall be equal and redundant.

### **R-COLA Question 13.06-13**

**Regulatory Basis:** 10 CFR 73.55 (i)(4)(iii) Applicants for an operating license under the provisions of part 50 of this chapter, or holders of a combined license under the provisions of part 52 of this chapter, shall construct, locate, protect, and equip both the central and secondary alarm stations to the standards for the central alarm station contained in this section. Both alarm stations shall be equal and redundant, such that all functions needed to satisfy the requirements of this section can be performed in both alarm stations. 10 CFR 73.55(e)(9)(v)(D) At a minimum, the following shall be considered vital areas: (A) The reactor control room; (B) The spent fuel pool; (C) The central alarm station; (D) The secondary alarm station in accordance with § 73.55(i)(4)(iii).

## Request for Additional Information No. 5629

Shearon Harris  
Progress Energy Carolinas, Inc.  
Docket No. 52-022 and 52-023  
SRP Section: 13.06.01 - Physical Security - Combined License  
Application Section: Part 8, Physical Security Plan

### QUESTIONS for Reactor Security and Programs Branch (NSIR/DRP/RSPLB)

#### 13.06.01-28

Physical Security Plan, Revision 1, Appendix C, Safeguards Contingency Plan, Pages C-26,27, Sections 8.3, 8.4. This section of the safeguards contingency plan describes "how" the various components of the physical protection program are integrated into a comprehensive program that results in defense-in-depth. Specifically, how various barriers support the adversary delay, funneling and redirection for HAR (site specific measures for HAR). Physical barriers must be designed, constructed, and installed as needed to perform a specific function within the physical protection program. The need for a specific function is determined by each licensee based on the site-specific analysis required by 10 CFR 73.55(b)(4). Describe the types of physical barriers, the functions to be performed by physical barriers, and the general construction standards of each type of physical barrier to be used at your facility.

**Regulatory Basis:** 10 CFR Part 73, Appendix C, Section II, Paragraph B.3.c, Safeguards Systems. The safeguards contingency plan must include a description of the physical security systems that support and influence how the licensee will respond to an event in accordance with the design basis threat described in § 73.1(a). The licensee's description shall begin with onsite physical protection measures implemented at the outermost facility perimeter, and must move inward through those measures implemented to protect target set equipment. (i) Physical security systems and security systems hardware to be discussed include security systems and measures that provide defense in depth, such as physical barriers, alarm systems, locks, area access, armaments, surveillance, and communications systems.

#### 13.06.01-29

Physical Security Plan, Revision 1, Appendix C, Safeguards Contingency Plan, Page C-27, Section 8.5. This section describes the "Inner Defense – Vital Area Barrier," specific to HAR. There appears to be no description of the "Inner Defense" measures for SHNP. The NRC Staff requests the applicant to include additional information or explain the exclusion.

**Regulatory Basis** Title 10 CFR 73.55(K)(8)(ii) Initiate response actions to interdict and neutralize the threat in accordance with the requirements of part 73, appendix C, section II, the safeguards contingency plan, and the licensee's response strategy. Appendix C to part 73 A (4) The responses should be timely, and include personnel who are trained and qualified to respond in accordance with a documented training and qualification program.

#### 13.06.01-30

Physical Security Plan, Revision 1, Appendix C, Safeguards Contingency Plan, Page C-28, Section 8.6, Paragraph 2. This section describes the armed and integrated response measures that are specific to SHNP. It does not appear to reflect the incorporation of the integrated response measures for HAR.

The NRC Staff requests the applicant to include additional information of the site specific measures for HAR.

**Regulatory Basis:** Title 10 CFR 73.55(K)(8)(ii) Initiate response actions to interdict and neutralize the threat in accordance with the requirements of part 73, appendix C, section II, the safeguards contingency plan, and the licensee's response strategy. Appendix C to part 73 A (4). The responses should be timely, and include personnel who are trained and qualified to respond in accordance with a documented training and qualification program.

**13.06.01-31**

Physical Security Plan, Revision 1, Appendix C, Safeguards Contingency Plan, section 8, page C-24 to C-29, Confirm that the protective strategy description properly describes the Westinghouse protective strategy design features that are relied upon to effectively implement the protective strategy? (AP 1000 COL Standard Technical Report APP-GW-GLR-66, Rev 2) Examples: BRE locations, Responder locations and the Delay fence locations.

**Regulatory Basis:** 10 CFR 73.55(c)(1)(ii) "Licensee security plans must describe site-specific conditions that affect how the licensee implements Commission requirements."