

KHNPDCDRAIsPEm Resource

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Sent: Wednesday, September 02, 2015 3:16 PM
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Cc: Lee, Pete; Huyck, Doug; Olson, Bruce; Lee, Samuel
Subject: APR1400 Design Certification Application RAI 197-8176 (14.03.12 - Physical Security Hardware - Inspections, Tests, Analyses, and Acceptance Criteria)
Attachments: APR1400 DC RAI 197 RSRLB 8176.pdf; image001.jpg

KHNP,

The attachment contains the subject request for additional information (RAI). This RAI was sent to you in draft form. Your licensing review schedule assumes technically correct and complete responses within 30 days of receipt of RAIs. However, KHNP requests, and we grant, the following days to respond to the RAI's questions. We may adjust the schedule accordingly.

14.03.12-1: 45 days
14.03.12-2: 45 days
14.03.12-3: 45 days
14.03.12-4: 45 days
14.03.12-5: 30 days
14.03.12-6: 45 days
14.03.12-7: 45 days
14.03.12-8: 30 days
14.03.12-9: 30 days

Please submit your RAI response to the NRC Document Control Desk.

Thank you

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REQUEST FOR ADDITIONAL INFORMATION 197-8176

Issue Date: 09/02/2015

Application Title: APR1400 Design Certification Review – 52-046

Operating Company: Korea Hydro & Nuclear Power Co. Ltd.

Docket No. 52-046

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

Application Section: Tier 1 Sections 2.12, 2.6.8, 2.6.9 and Tier 2 Sections. 14.2.13, 14.3.2.12, 14.3.6, 14.3.7

QUESTIONS

14.03.12-1

(U) Tier 1, Section 2.12.1, Design Description (Pages 2.12-1 through 2.12-2):

(U) Revise this section for completeness and accuracy of APR-1400 standard design descriptions for physical security systems that meet the prescriptive requirements of 10 CFR 73.55, and describe those systems or portions of the APR-1400's physical security system that are site- specific (i.e., not within the scope of the DC or are information to be provided by a COL applicant). Verify that the combinations of design descriptions in Tier 1 conform complete and accurately with Appendix A to NUREG 0800 SRP 14.3.12, Revision 1, May 2010, that addressed design commitments, ITA, and acceptance criteria for a minimum set of physical security ITAAC based on the prescriptive requirements of 10 CFR 73.55 requirements for the design of physical security systems. Include the following in the revision to Section 2.12.1:

- a. **(U)** Identify the subjects (or titles) for design description Item Nos. 2.a, 2.b, 2.c, 3.a, 3.b, 3.c, 4.a, 4.c, 8.a, 8.b, and 9. Specify in Section 2.12.1 that KHNP considers these items outside the scope of the APR-1400 standard design, and clearly indicate that they are site-specific design descriptions that a COL applicant would provide. Also, indicate whether these items correspond to design descriptions in Appendix A to NUREG 0800 SRP 14.3.12, which identified a minimum set of generic physical security ITAAC (i.e., PS-ITAA Nos. 2(a), 2(b), and 2(c) for protected area barrier requirements; PS-ITAA Nos. 3(a), 3(b), and 3(c) for isolation zone requirements; PS-ITAA Nos. 4(a) and 4(c) for protected area perimeter intrusion detection and assessment systems requirements; PS-ITAA Nos. 8(a), and 8(b) for access control portals and search equipment requirements; PS-ITAA No. 9 for picture badge identification system requirements; and PS-ITAA No. 11.c for security alarm system interlock).
- b. **(U)** Indicate, where the design descriptions is provided in Section 2.12.1, that the design descriptions only address the portions of the design of physical security systems that KHNP has included within the scope of the APR-1400 DC, and they do provide the design descriptions necessary to meet all requirements specified in the corresponding prescriptive requirement of 10 CFR 73.55. Clarify that additional design descriptions will be provided by the COL applicant for items where the APR-1400's design descriptions provided only address a portion of the prescriptive requirement for design in 10 CFR 73.55 and limitation of design descriptions, which must be further developed by a COL applicant for site-specific design of physical security system and complete the physical security ITAAC. The following are examples of where design descriptions did not address or omitted specifics of requirements stated in 10 CFR 73.55 and where they are not identified as "COL information:"
 - **(U)** Item No. 1.b does not meet the design requirement that access to vial equipment requires passage through at least a second physical barrier, and only partially satisfy the requirement of 10 CFR 73.55(e)(9)(1);

REQUEST FOR ADDITIONAL INFORMATION 197-8176

- (U) Item No. 5, does not include design of (or identify plant system that will be relied-on) for illumination that enable assessment and observation for implementing security response meeting 10 CFR 73.55(i)(6)(ii);
 - (U) Item No. 6 does not address the design requirement for the bullet resistant of the enclosure or structures providing the last access control function for access, and only partially satisfy the requirement of 10 CFR 73.55(e)(5);
 - (U) Item No.15 does not address design of emergency exits in the protected area that meets the requirement of 10 CFR 73.55(e)(8)(iii).
- c. (U) Provide the design descriptions to include that the design of alarm system will not allow the status of a detection point, locking mechanism or access control device to be changed without the knowledge and concurrence of the alarm station for meeting requirement of 10 CFR 73.55(i)(4)(ii)(F), SRP 14.3.12, Appendix A, Item No. 11(b).
- d. (U) Indicate in Item No. 14, "Intrusion detection system," in lieu of "equipment exists," to specify that design of a specific physical security system will meet the requirement for 10 CFR 73.70(f). The recording capability is integral to intrusion detection system to record system status and conditions, such as alarm, trouble, and supervision.
- e. (U) Clarify whether design descriptions for Item No. 4.b and Item No. 11.a include the design of intrusion detection and assessment system that is capable of assessing and video image recording of intrusion alarmed access points of vital areas.

(U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification 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. Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 52.47(b)(1) requires that the application must contain 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.

(U) Tier1, Section 2.12.1, "Design Description," identified a number of items as COL information without specifics subject or titles of what KHNP considered site-specific physical security systems that are not included within the scope of the ARP-1400 DC. The indications of "COL information," provide no information for the Commission's finding or for the staff to confirm that design of physical security systems identified are either within or outside the scope of the DC for certification of the APR-1400.

(U) Also, several the design descriptions provided in Section 2.12.1 omitted design descriptions for meeting requirements of 10 CFR 73.55 for physical security system and hardware and did not identified the omitted design descriptions as site-specific. They are currently not identified as "COL information." The revisions to Section 2.12.1 (and corresponding information in Table 2.12-1, "Inspections, Tests, Analyses, and Acceptance Criteria,") must address design descriptions supporting design (and verification) of physical security systems meeting the requirements of 10 CFR 73.55.

REQUEST FOR ADDITIONAL INFORMATION 197-8176

14.03.12-2

(U) Tier 1, Section 2.12.1, Design Description, Item No.10 and Section 2.12.2, Inspections, Tests, Analyses, and Acceptance Criteria, Table 2.12-1, ITAAC (Pages 2.12-1 and 2.12-5):

(U) Indicate whether for design descriptions, “designed with locking devices and intrusion detection devices that annunciate in the central and secondary alarm stations,” in Section 2.12.1, Item No. 10, and Table 2.12-1, Design Commitment No. 10, as stated is intended to apply to all vital areas and not limited only to “unoccupied vital areas.”

(U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification 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. Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 52.47(b)(1) requires that the application must contain 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.

(U) Clarification is needed to confirm that the standard design supporting the Physical Security Hardware ITAAC Item No. 10 requires the verification that all (not limited to unoccupied) vital areas are designed to lock with intrusion detection system that alarm at the CAS and SAS, and is not limited to unoccupied vital areas. The design descriptions and ITAAC design commitment and acceptance criteria as stated meets the requirements of 10 CFR 73.55(e)(9)(ii) and 10 CFR 73.55(i)(2).

14.03.12-3

(U) Tier 1, Section 2.12.2, Inspections, Tests, Analyses, and Acceptance Criteria, Table 2.12-1, ITAAC Item Nos. 16.a., 16.b, and 16.c (Page 2.12-7) and Tier 1, Section 2.6.8, “Lighting Systems,” (Page 2.6-57) and Section 2.6.8.2, “Inspection, Tests, Analyses, and Acceptance Criteria,” Table 2.5.8-1 (Page 2.6-57 to 2.6-60):

- a. (U) Discuss whether the plant emergency DC lighting subsystem, described in Section 2.6.8.1, Item No. 4.b, is relied on for illumination for performing security functions (i.e., assessments, monitoring, observations, and security responses for interdiction and neutralization) within the interior and exterior of the APR1400 structures. Indicate whether the plant emergency DC lighting system provide sufficient illumination for security functions and specify the design and performance requirements for the minimum illumination provided for perform security functions. Indicate whether the ITA, specific for verifying the construction and installation of lighting system providing illumination for security, will reside within the verification of ITAAC described in physical security ITAAC described in Table 2.12-1 or plant emergency lighting ITAAC described in Table 2.6.8-1.
- b. (U) If the plant emergency lighting is not relied on to enable performing security functions during loss of normal plant lighting, as implied in Tier 2, Section 9.5.3, “Light Systems,” provide the design descriptions for the dedicated “security lighting system,” with the appropriate descriptions of interface between plant and security specific systems (e.g., Tier 2 Sections 13.6 and 9.5.3). Include in Tier 1, Section 2.12, “Physical Security Hardware,” the appropriate design descriptions and physical security ITAAC for the “security lighting system,” along with the appropriate supporting technical information in Section 14.3.12

REQUEST FOR ADDITIONAL INFORMATION 197-8176

- (U) Note: RAI responses/revisions to DCD, with specific detail of how design of plant or independent security lighting system meets the requirements of 10 CFR 73.55 must be protected accordance with requirements for safeguards information and/or security-related information.
- c. (U) Verify that the minimum illumination design requirement (i.e., 0.1 foot-candle/square feet at the floor level) also include a criteria for system performance of minimum illumination of not less than average of 1 foot candle (10.8 lux) for Section 2.6.8, Item No. 4.b and corresponding lighting system ITAAC No. 4.b. For example, a typical performance standard established in industry Life Safety Code states that performance of the emergency lighting provide illumination of egress is not less than an average of 1 foot-candle (10.8 lux) and, at any point, not less than 0.1 foot-candle (1.1 lux), measured along the path of egress at floor level (i.e., National Fire Protection Association Standard NFPA 101, Life Safety Code, Chapter 7.9.2.1.1).
- d. (U) Specify the minimum illumination level that will be provided by design of plant emergency lighting system (or a dedicate security lighting system) for illumination in security alarm stations or other security locations. Indicate whether the design for a minimum of 10 foot-candle/square feet applies to security alarm stations for performing security functions and other important locations (e.g., Emergency Operating Center, Technical Support Center, Operational Support Center, etc.) that support plant operations and/or emergency response in the event of a loss of plant normal lighting. If 0.1 foot-candle at the floor level is the acceptance criteria at other locations, provide the technical basis on how minimum illumination of 0.1 foot-candle vs. a 10 foot-candle is adequate to enable reliable performance of tasks for activities required for safety/security response activities at these locations during loss of normal power or emergencies.
- (U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification 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. Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 52.47(b)(1) requires that the application must contain 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.
- (U) Tier 1 Section 2.6.8 and respective plant lighting ITAAC (Table 2.6.8-1) include emergency DC lighting for a minimum illumination and durations for loss of normal plant lighting. The design descriptions in Section 2.6.8 (or Section 2.12.1) does not address illumination for security within or exterior of structures of the APR1400. However, Tier 2, Section 9.5.3 of the DCD identify a security lighting system. Clarification is needed with regards to the design of the plant system to meet both safety and security function or whether there is a dedicated and separate system for meeting security functions. Appropriate interface between Section 2.6.8 and Section 2.12 is need to ensure adequate design descriptions and ITAAC for system and hardware providing illumination for safety and security.
- (U) The APR1400's design descriptions of 0.1 foot-candle at the floor level for DC emergency lighting does not capture the design for an average level of illumination (e.g., not less than 1 foot-candle) found in building codes and standard for life safety egress. KHNP should verify whether the design of the emergency lighting will be capable of providing such performance for the design descriptions and ITAAC in Section 2.6.8. The minimum illumination value found in 10 CFR 73.55 for enabling security functions of monitoring, observations, assessment and initiation of contingency response exterior of structures in the protected area is at least 0.2 foot-candle measured horizontally at ground level. Interior building emergency lighting system that comply with building codes and standards is relied on for performing security functions, including assessment and security response within internal of structures.

REQUEST FOR ADDITIONAL INFORMATION 197-8176

14.03.12-4

(U) Tier 1, Section 2.12.2, Inspections, Tests, Analyses, and Acceptance Criteria, Table 2.12-1, ITAAC Item Nos. 16.a., 16.b, and 16.c (Page 2.12-7) and Tier 1, Section 2.6.9.2, Inspections, Tests, Analyses, and Acceptance Criteria, Table 2.6.9-1, Communications System ITAAC (Page 2.6-63):

- a. **(U)** Provide appropriate design descriptions for interface between the verifications of security communication system and hardware and the plant communication system captured under ITAAC show in Table 2.12-1 and Table 2.6.9-1, respectively. Specifically indicate whether the verifications of Table 2.12-1, Items No. 16.a, 16.b, and 16.c, are performed independently for ITAAC described in Table 2.12-1 or they are within the verifications for plant communication for ITAAC described in Table 2.6.9-1 (i.e., Items No. 2 and 3).
- b. **(U)** Indicate how ITAAC for each, Item No. 16.a, 16.b, and 16.c, will be adequately inspected, tested, or combinations of inspected and tested, analyzed, and documented and closed.
- c. **(U)** Describe, in supporting Tier 2, Section 13.6 or technical reports incorporated by reference, the detail descriptions of how the design of the plant communication systems relied-on (or if independent from plant communications system the dedicate security communications system) for meeting physical security functions identified in design descriptions in Tier 1, Section 2.12.2 and ITTAC identified in Table 2.12-1, Item Nos. 16.a, 16.b, and 16.c.

(U) Note: RAI response/revisions to DCD, with specific detail of how design of security system or pant communication systems meet the requirements of 10 CFR 73.55 are protected accordance with requirements for safeguards information and/or security-related information.

(U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification 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. Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 52.47(b)(1) requires that the application must contain 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.

(U) Tier 1, Section 2.12.1 and Section 2.6.9.2 each contain ITAAC addressing communications based on system that are relied for meeting both safety and security functions. Appropriate interface between Section 2.6.9 and Section 2.12 is need to ensure adequate design descriptions and ITAAC for system and hardware providing communications for safety and security Appropriate interface is necessary to ensure adequate closure of ITAAC for system and hardware provided different but important functions.

REQUEST FOR ADDITIONAL INFORMATION 197-8176

14.03.12-5

(U) Tier 2, Section 14.2.13, “Combined License Information,” (Page 14.2-304):

(U) Remove the COL Information Item No. COL 14.2(5), which defers to the COL applicant the development of detail descriptions addressing general system testing requirements for APR1400’s physical security ITAAC.

(U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification 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. Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 52.47(b)(1) requires that the application must contain 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.

(U) Tier 2, Section 14.2.13, “Combined License Information,” Item COL 14.2(5) states that “[t]he COL applicant is to develop the detailed description of test and acceptance criteria for the Security System,.” This COL information item defers to a COL applicant to develop appropriate testing procedures for verifying the APR1400 Physical Security ITAAC described in Tier 1, Section 2.12 and ITAAC Table 12.12-1, which are included in the APR-1400 standard design certification and are not site-specific information. The Commission’s regulatory finding of a reasonable assurance that ITA of ITTAC will permit acceptance and inspections for construction and installations as described in standard design for finality of a design certification cannot rely on information that will be provided in the future or be based on a COL information item that defers the action to an operating license applicant.

14.03.12-6

(U) Tier 2, Chapter 14.3.2.12, “ITAAC for Physical Security Hardware,” (Pages 14.3-28 to 14.3-29):

(U) Provide descriptions of construction activities, preoperational testing, and test procedures for physical security systems and hardware within the scope of the standard APR1400 standard design. Specifically, address the following:

- a. **(U)** Construction quality activities associated with installation of physical security-related systems (e.g., conduit and cable installation, circuit integrity, separations, buried sensors, delay barriers or building walls, protection of penetrations, etc.) should include security-related systems as systems components that may not be easily confirmed as adequate after construction without non-destructive methods, and preoperational testing that provide assurance of readiness of physical security systems and hardware to perform their intended security functions.
- b. **(U)** For each physical security ITAAC, describe objectives, prerequisites, test methods, data required, acceptance criteria, and any special precautions such as for protecting SGI, restoring systems, and documentation of result of ITA for identified physical security ITAAC. Descriptions should apply the format and content described in Section 14.2.3.1, “Test Procedure Preparation” and consistent with information found for plant system in Tier 2, Section 14.2.12, such as the test abstracts provided for normal and emergency lighting in Tier 2, Section 14.2.12.1 80 and 14.2.12.1.81.

(U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification must include performance requirements and design information sufficiently detailed to permit the preparation of acceptance and inspection requirements by the NRC, and procurement specifications

REQUEST FOR ADDITIONAL INFORMATION 197-8176

and construction and installation specifications by an applicant. . Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 52.47(b)(1) requires that the application must contain 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.

(U) The information in Section 14.3.2.12 (or Tier 1, Section 2.12) does not provide sufficient descriptions of how testing or test procedures will be performed or developed, respectively, for a reasonable assurance of ITA for physical security systems identified as physical security ITAAC (i.e., Tier 1, Table 2-12.1). The descriptions of how construction activities, preoperational testing, and test procedures will be developed to contain the proposed inspections, tests, analyses, and acceptance criteria is needed for the Commission's finding of reasonable assurances that the conduct and performance of ITA will verify construction and installations of physical security systems performance and functions satisfying physical security ITAAC for the APR1400 standard design. Information must be sufficient detail to support basis for reasonable assurance of ITA that correspond to the each of the physical security ITAAC identified Tier 1, Table 2.12-1 will be constructed and will be operated in conformity with the design certification, the provisions of the Act, and the Commission's rules and regulations. The description how inspections, test, and/or analyses for physical security systems should be describe in Tier 2 Section 14.3.2.12 that specifically address physical security ITAAC

14.03.12-7

(U) Tier 2, Chapter 14.2.13, "Combined License Information," Item No. 14.2(11), (Pages 14-2-305):

- a. **(U)** Remove the COL Information Item No. COL 14.2(11) which defers the development of test procedure of the communication system described in the Tier 1 and Tier 2 of the APR1400 DC. Provide test descriptions, individual pre-operational test addressing general system testing requirements for the plant communication systems described in Tier 1, Section 2.6.9 and Communication System ITTAC identified in Table 2.6.9.1
- a. **(U)** Provided, in Section 14.2.12.1, test descriptions, individual pre-operational test addressing general system testing requirements for the security communication systems, including plant system credited for security communications.

(U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification 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. Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 52.47(b)(1) requires that the application must contain 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.

(U) Section 14.2.13, Combined License Information, identified a COL Information Item No. COL 14.2(11) states that "[t]he COL applicant is to develop the test procedure of the communication system." This defers to the a COL applicant to address the Communications System ITAAC that are described in Tier 1, Section 2.6.9, ITAAC Table 2.6.9.1. The plant communications system included in the APR1400 standard design DC is not site-specific, and therefore regulatory finding for the reasonable assurance that ITA

REQUEST FOR ADDITIONAL INFORMATION 197-8176

permit acceptance and inspection for construction and installation as described in standard design is based on sufficient information provided on docket of the APR-1400 and cannot be based on information that will be provided in the future or be based on a COL information item the defers information to a COL applicant.

14.03.12-8

(U) Tier 2, Section 14.3.6, "Combined License Information," (Page 14.3-34):

(U) Revise COL Information Item No. 14.3(3) to indicate that "the COL applicant to provide proposed ITAAC for the facility's physical security hardware not addressed in the DCD in accordance with RG 1.206 (Reference 1)."

(U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification 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. . Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 52.47(b)(1) requires that the application must contain 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.

(U) COL 14.3(3) states that the "COL applicant is to provide the proposed ITAAC for the facility's physical security hardware address in Subsection 14.3.2.12." The COL information item does not meet the requirement that DC applicant provide sufficient information for address the ITAAC and their verifications of physical security systems that are within the scope of the DC. The COL information item, if needed, must be limited to those systems or portions of physical security systems that are considered site-specific and therefore justified for the COL applicant to address. The descriptions in Section 14.3.2.12 do not correspond to items indicated as "COL information" in the design descriptions and ITAAC found in Tier 1 Sections 2.12.1 and 2.12.2. The items identified in Section 14.3.2.12 include physical security systems that are within the scope of the APR1400 DC, which are not reserved for a COL applicant to address. A revision to the COL information item COL 14.3(3) is needed to ensure that the COL applicant address the physical security systems that are site-specific and outside the scope of the APR1400 DC.

14.03.12-9

(U) Tier 2, Section 14.3.7, References (Page 14.3-36):

(U) In Section 14.3.7, Reference No. 14, indicate NUREG-0800, SRP 14.3.12, Revision 1, published May 2010, in lieu of Revision 0, published March 2007. The most recent SRP 14.3.12 should be use by an applicant to develop the DC application.

(U) Regulatory Basis: Subpart B of 10 CFR 52, § 52.47, requires that information submitted for a design certification must include performance requirements and design information sufficiently detailed to

REQUEST FOR ADDITIONAL INFORMATION 197-8176

permit the preparation of acceptance and inspection requirements by the NRC, and procurement specifications and construction and installation specifications by an applicant. . Title 10 CFR 52.48 requires the applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFRF 52.47(a)(9) states that “[f]or applications for light-water cooled nuclear power plants, an evaluation of the standard plant design against the Standard Review Plan (SRP) revision in effect 6 months before the docket date of the application.

(U) Reference No. 14, on Page 14.3-36, did not reference Revision 1 of NUREG SRP 14.3.12, dated of May 2010 which superseded the Revision 0 version of SRP 14.3.12, dated March 2007. Although the staff guidance in SRP 14.3.12 are not regulatory requirements or regulatory guides, conforming with descriptions of physical security ITAAC found in Appendix A to NUREG 0800 SRP 14.3.12 provides assurance that the applicant include information necessary, but not limited to, on the docket for the Commission to efficiently and effectively determine regulatory requirements have been met for the findings for certification of APR14000 standard design in accordance with requirements of Subpart B of 10 CFR 52. The SRP is not a substitute for the regulations, and compliance is not a requirement. However, the SRP provide guidance for staff review of applications and include acceptable method of complying with the Commission's regulations.

