ArevaEPRDCPEm Resource

From: WILLIFORD Dennis (AREVA) [Dennis.Williford@areva.com]
Sent: Friday, October 07, 2011 1:15 PM
To: Tesfaye, Getachew
Cc: BENNETT Kathy (AREVA); CRIBB Arnie (EXTERNAL AREVA); DELANO Karen (AREVA); HALLINGER Pat (EXTERNAL AREVA); HATHCOCK Phillip (AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA); WELLS Russell (AREVA); VANCE Brian (AREVA); PEDERSON Ronda (AREVA); LENTZ Tony (EXTERNAL AREVA)
Subject: DRAFT Response to U.S. EPR Design Certification Application RAI No. 491 (5795), FSAR Ch. 14, Question 14.03.12-58
Attachments: RAI 491 Question 14.03.12-58 Response US EPR DC - DRAFT.pdf

Getachew,

Attached is a draft response for RAI No. 491 (5795), FSAR Ch. 14, Question 14.03.12-58 in advance of the November 10, 2011 final date.

Let me know if the staff has questions or if this can be sent as a final response.

Thanks,

Dennis Williford, P.E.
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
7207 IBM Drive, Mail Code CLT 2B
Charlotte, NC 28262
Phone: 704-805-2223
Email: Dennis.Williford@areva.com

From: WILLIFORD Dennis (RS/NB)
Sent: Friday, September 30, 2011 5:36 PM
To: Getachew.Tesfaye@nrc.gov
Cc: BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); WELLS Russell (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 491 (5795), FSAR Ch. 14, Supplement 1

Getachew,

On July 5, 2011, AREVA NP Inc. provided a schedule for a technically correct and complete response to the 1 question in RAI 491. The schedule for the response to this question has been revised as provided below.

Question #	Response Date
RAI 491 — 14.03.12-58	**November 10, 2011**

Sincerely,

Dennis Williford, P.E.
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.

7207 IBM Drive, Mail Code CLT 2B
Charlotte, NC 28262
Phone: 704-805-2223
Email: Dennis.Williford@areva.com

From: WILLIFORD Dennis (RS/NB)
Sent: Tuesday, July 05, 2011 10:06 AM
To: Tesfaye, Getachew
Cc: BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 491 (5795), FSAR Ch. 14

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 491 Response US EPR DC.pdf" provides a schedule since a technically correct and complete response to the question cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 491 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 491 — 14.03.12-58	2	2

The schedule for a technically correct and complete response to this question is provided below.

Question #	Response Date
RAI 491 — 14.03.12-58	September 30, 2011

Sincerely,

Dennis Williford, P.E.
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
7207 IBM Drive, Mail Code CLT 2B
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From: Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Friday, June 03, 2011 7:23 PM
To: ZZ-DL-A-USEPR-DL
Cc: Lee, Pete; Huyck, Doug; Miernicki, Michael; Colaccino, Joseph; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 491 (5795), FSAR Ch. 14

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on May 16, 2011, and discussed with your staff on June 2, 2011. No change is made to the draft RAI as a result of that discussion except for minor editorial changes. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a date for receipt of this information will

be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

Thanks,
Getachew Tesfaye
Sr. Project Manager
NRO/DNRL/NARP
(301) 415-3361

Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 3459

Mail Envelope Properties (2FBE1051AEB2E748A0F98DF9EEE5A5D48E8F6D)

Subject: DRAFT Response to U.S. EPR Design Certification Application RAI No. 491 (5795), FSAR Ch. 14, Question 14.03.12-58
Sent Date: 10/7/2011 1:15:06 PM
Received Date: 10/7/2011 1:15:50 PM
From: WILLIFORD Dennis (AREVA)

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Files	**Size**	**Date & Time**	
MESSAGE	3987	10/7/2011 1:15:50 PM	
RAI 491 Question 14.03.12-58 Response US EPR DC - DRAFT.pdf			365973

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
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Response to

Request for Additional Information No. 491(5795), Revision 0
Question 14.03.12-58

6/3/2011

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 14.03.12 - Physical Security Hardware - Inspections, Tests, Analyses, and Acceptance Criteria
Application Section: Tier 1, Chapter 3

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

Question 14.03.12-58:

Follow-up to RAI No. 447, Question 14.03.12-57

Tier 1, Chapter 3, Table 3.3-1, Security ITAAC (3 pages): Revise Table 3.3-1, Security ITAAC, descriptions of commitment, inspections, tests, and/or analyses (ITA), and acceptance criteria to conform to NUREG 0800, SRP 14.3.12 (May 2010).

Regulatory Basis: Subpart B of Title 10 CFR (10 CFR) 52, § 52.47, requires that information submitted for a design certification (DC) must include performance requirements and design information sufficiently detailed to permit the preparation of acceptance and inspection requirements by the NRC, and procurement specifications and construction and installation specifications by an applicant. Title 10 CFR 52.80(a) and 52.80(a)(2) requires content of applications to propose ITA and acceptance criteria that are necessary and sufficient to provide reasonable assurance the facility has been constructed and will be operated in conformity with the combined license. The ITAAC contained in the DC must be described for certification and for approval.

The Tier 1, Chapter 3, Table 3.3-1, in Revision 2 of the FSAR, which contains descriptions of security ITAAC has not been updated to conform to NUREG 0800, SRP 14.3.12 dated May, 2010, which superseded the standard security ITAAC descriptions. Table 3.3-1 was updated to in 2008. The applicant in response to RAI No. 42, Question No. 14.03.12-6, Supplement 1, dated August 7, 2008, revised Table 3.3-1 to incorporate the standard security ITAAC descriptions current at that time. Since then, the standard security ITAAC had been revised with industry input to the current descriptions contained in SRP 14.3.12 (May 2010). The recent response to RAI No. 447 ,Question 14.03.12-57, submitted on April 18, 2011, indicated that Table 3.1-1 will be revised to add SRP 14.3.12 (May 2010) Items 11(b) through (e). The staff requests the applicant to update the remaining portions of the Table 3.3-1 to reflect the current standard security ITAAC descriptions that are within the scope of the design certification. The security ITAAC that are not within the scope of the standard design should be identified as reserved for COL applicant implementation for completeness.

Response to Question 14.03.12-58:

U.S. EPR FSAR Tier 1, Section 3.1 will be revised to be consistent with the guidance of SRP 14.3.12, Revision 1.

The portions of SRP 14.3.12, Revision 1 that are COL applicant interface requirements, are shown in Table 14.03.12-58-1, and are identified in U.S. EPR FSAR Tier 1, Section 3.1.2. Other deviations from SRP 14.3.12, Revision 1 are noted as follows:

- The design commitment for SRP 14.3.12, ITAAC 6, “Bullet-Resisting Barriers Requirements,” states:

  > “The last access control function for access to the protected area will be bullet resistant, to at least Underwriters Laboratories Ballistic Standard 752, ’The Standard of Safety for Bullet-Resisting Equipment,’ Level 4, or National Institute of Justice Standard 0108.01, ’Ballistic Resistant Protective Materials,’ Type III.”

The corresponding U.S. EPR FSAR Tier 1, Table 3.1-1, Item 1.3 only specifies the Underwriters Laboratories Ballistic Standard 752, which sufficiently meets the requirements.

- The acceptance criteria for SRP 14.3.12, ITAAC 7, "Vehicle Control Measures Requirements," make reference to NUREG/CR-6190. This NUREG is not specified in the corresponding U.S. EPR FSAR Tier 1, Table 3.1-1, Item 1.6 since the NUREG provides guidance not requirements. As noted in SRP 14.3, Section IV.4.A:

  "The use of codes and standards in Tier 1 should be minimized, with exceptions granted on a case-by-case basis. Instead, the applicable requirements from the regulations, codes, or standards should be stated in Tier 1, rather than reference them."

- The portion of SRP 14.3.12, Item 11(a) that is related to "continuously manned" onsite alarm stations is not within the scope of the standard design, and is reserved for COL applicant implementation via operational programs. The portion of Item 11(a) that is related to "concurrent display" is within the scope of the standard design, and will be addressed as part of the design certification.

- Minor changes in SRP 14.3 (e.g., use of present tense versus future tense) have been made to be consistent with the style guide for ITAAC.

ANP-10295P, "U.S. EPR Security Design Features Technical Report," Appendix G, will be revised to reflect the revised standard security ITAAC description that is within the scope of the design certification. This revision will be submitted to NRC concurrent with the Response to RAI 425, Questions 13.06.02-1, 13.06.02-2, and 13.06.02-4.

FSAR Impact:

U.S. EPR FSAR Tier 1, Section 3.1 will be revised as described in the response and indicated on the enclosed markup.

Table 14.03.12-58-1—Interface Requirements

Number and applicable Section from SRP 14.3.12	Interface Requirement
1.1 Ref. SRP 1(b)	Access to vital equipment requires passage through at least two physical barriers.
1.2 Ref. SRP 2(a)	Physical barriers for the protected area perimeter are not part of vital area barriers.
1.3 Ref. SRP 2(b)	Penetrations through the protected area barrier will be secured and monitored.
1.4 Ref. SRP 2(c)	Unattended openings that intersect a security boundary, such as underground pathways, will be protected by a physical barrier and monitored by intrusion detection equipment or provided surveillance at a frequency sufficient to detect exploitation.
1.5 Ref. SRP 3(a)	Isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area and are designed with sufficient size to permit observation and assessment on either side of the barrier.
1.6 Ref. SRP 3(b)	Isolation zones will be monitored with intrusion detection and assessment equipment that is designed to provide detection and assessment of activities within the isolation zone.
1.7 Ref. SRP 3(c)	Areas where permanent buildings do not allow sufficient observation distance between the intrusion detection system and the protected area barrier (e.g., the building walls are immediately adjacent to, or an integral part of the protected area barrier) are monitored with intrusion detection and assessment equipment that is designed to detect the attempted or actual penetration of the protected area perimeter barrier before completed penetration of the barrier and assessment of detected activities.
1.8	Deleted.
1.9 Ref. SRP 6	The external walls, doors, ceiling and floors in the last access control function for access to the protected area are bullet resistant to at least UL Ballistic Standard 752, "The Standard of Safety for Bullet-Resisting Equipment," Level 4.
1.10 Ref. SRP 8(a)	Access control points are established and designed to control personnel and vehicle access into the protected area.
1.11 Ref. SRP 8(b)	Access control points are established and designed with equipment for the detection of firearms, explosives, incendiary devices, or other items which can be used to commit radiological sabotage at the protected area personnel access points.
1.12 Ref. SRP 9	An access control system with a numbered photo identification badge system is designed and installed for use by individuals who are authorized access to protected areas and vital areas without escort.
1.13 Ref. SRP 15	Emergency exits through the protected area perimeter boundaries are alarmed with intrusion detection devices and secured by locking devices that allow prompt egress during an emergency.

U.S. EPR Final Safety Analysis Report Markups

3.0 Nonsystem Based Design Descriptions and ITAAC

3.1 Security

The physical security program provides physical features to detect, delay, assist response to, and defend against the design basis threat (DBT) for radiological sabotage.

3.1.1 Design Features

1.1 Vital equipment is located only within a vital area.

1.2 Isolation zones and exterior areas within the protected area are provided with illumination to permit assessment in the isolation zones and observation of activities within exterior areas of the protected area.~~observation of abnormal presence or activity of persons or vehicles.~~

1.3 The external walls, doors, ceiling and floors in the main control room (MCR), ~~and~~ central alarm station, and secondary alarm station are bullet resistant to at least ~~a~~ Underwriter's Laboratories Inc. (UL) Ballistic Standard 752, "The Standard of Safety for Bullet-Resisting Equipment," Level 4.

1.4 The central and secondary alarm stations are designed, equipped and constructed such that no single act, in accordance with the DBT of radiological sabotage, can simultaneously remove the ability of both the central and secondary alarm stations to (1) detect and assess alarms, (2) initiate and coordinate an adequate response to alarms, (3) summon offsite assistance, and (4) provide effective command and control.

1.5 Both the central and secondary alarm stations are constructed, located, protected, and equipped to the standards for the central alarm station (alarm stations need not be identical in design but shall be equal and redundant, capable of performing all functions required of alarm stations).

~~1.4~~1.6 The vehicle barrier system is designed, installed, and located at the necessary stand-off distance to protect against the DBT vehicle bombs.

1.7 The perimeter intrusion detection system is designed to detect penetration or attempted penetration of the protected area perimeter barrier before completed penetration of the barrier, and for subsequent alarms to annunciate concurrently in at least two onsite alarm stations (central and secondary alarm stations).

~~1.5~~1.8 Unoccupied vital areas are ~~locked and alarmed with activated~~ designed with locking devices and intrusion detection devices ~~systems~~ that annunciate in the ~~C~~central and ~~S~~secondary ~~A~~alarm ~~S~~stations ~~upon intrusion into a vital area~~.

1.9 The perimeter assessment equipment are designed to provide video image recording with real-time and playback capability that can provide assessment of detected activities before and after each alarm annunciation at the protected area perimeter barrier.

Next File

1.10 The intrusion detection and assessment equipment at the protected area perimeter are designed to remain operable from an uninterruptible power supply in the event of the loss of normal power.

~~1.6~~1.11 Intrusion detection equipment and video assessment equipment annunciates and displays concurrently in at least two onsite alarms stations (central and secondary alarm stations).~~Security alarm annunciation occurs in the central alarm station and in at least one other continuously manned station not necessarily onsite.~~

1.12 1.~~13~~12 The ~~C~~central and secondary alarm stations are located inside the protected area and are designed so that the interiors of both alarm stations are not visible from the perimeter of the protected area.

1.13 1.~~14~~13 The alarm system does 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 operator in the other alarm station.

1.14 Intrusion detection and assessment systems are designed to provide visual display and audible annunciation of alarms in both the central and secondary alarm stations.

~~1.7~~1.15 The ~~S~~secondary security power supply system for alarm annunciator equipment and non-portable communications equipment is located within a vital area.

1.16 Nonportable communications equipment in the central and secondary alarm stations remain operable from an independent power source in the event of loss of normal power.

~~1.8~~1.17 Security alarm devices, including transmission lines to annunciators, are tamper-indicating and self-checking~~,~~ (e.g. an automatic indication is provided when failure of the alarm system or a component occurs or when on standby power), and alarm annunciation indicates the type of alarm~~,~~ (e.g., intrusion alarms, emergency exit alarm~~, etc.~~) and location.

~~1.9~~1.18 ~~The security alarm system will~~ Intrusion detection systems recording equipment records ~~each~~ onsite security alarm annunciation including the location of the alarm, ~~any~~ false alarm, alarm check, and tamper indication ~~by recording~~ and the ~~alarm~~ type of alarm, location, alarm circuit, ~~location,~~ date, and time.

~~1.10~~1.19 Emergency exits through the vital area boundaries are alarmed with intrusion detection devices and secured by locking devices that allow prompt egress during an emergency.

~~1.11~~1.20 The ~~C~~central and secondary alarm stations have conventional (land line) telephone service ~~and other communication capabilities~~ with the control room and local law enforcement authorities.

~~1.12~~1.21 The ~~C~~central and secondary alarm stations are capable of continuous communication with on-duty security force personnel.

3.1.2 Interface Requirements

1.1 Access to vital equipment requires passage through at least two physical barriers.

1.2 Physical barriers for the protected area perimeter are not part of vital area barriers.

1.3 Penetrations through the protected area barrier are secured and monitored.

1.4 Unattended openings that intersect a security boundary, such as underground pathways, are protected by a physical barrier and monitored by intrusion detection equipment or provided surveillance at a frequency sufficient to detect exploitation.

1.5 Isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area and are designed with sufficient size to permit observation and assessment ~~that allow 20 feet of observation~~ on either side of the barrier.

1.6 Isolation zones are monitored with intrusion detection and assessment equipment that is designed to provide detection and assessment of activities within the isolation zone.

1.7 Areas ~~W~~where permanent buildings do not allow sufficient observation distance between the intrusion detection system ~~a 20 foot observation distance on the inside of~~ and the protected area barrier (e.g., the building walls are immediately adjacent to, or an integral part of~~,~~ the protected area barrier) are monitored with intrusion detection and assessment equipment that is designed to detect the attempted or actual penetration of the protected area perimeter barrier before completed penetration of the barrier and assessment of detected activities.

~~1.4~~1.8 Deleted. ~~Intrusion detection system can detect penetration or attempted penetration of the protected area barrier.~~

~~1.5~~1.9 The external walls, doors, ceiling and floors in the last access control function for access to the protected area are bullet resistant to at least ~~a~~ UL Ballistic Standard 752, "The Standard of Safety for Bullet-Resisting Equipment," ~~l~~Level 4 ~~round~~.

~~1.6~~1.10 Access control points are established and designed to control personnel and vehicle access into the protected area.

~~1.7~~1.11 Access control points are established and designed with equipment for the detection of ~~to detect~~ firearms, explosives, ~~and~~ incendiary devices, or other items which can be used to commit radiological sabotage at the protected area personnel access points.

~~1.8~~1.12 An ~~security~~ access control system with a numbered photo identification ~~picture~~ badge~~s~~ system is designed and installed for use by individuals who are authorized access to protected areas and vital areas without escort.

~~1.9~~1.13 Emergency exits through the protected area perimeter boundaries are alarmed with intrusion detection devices and secured by locking devices that allow prompt egress during an emergency.

3.1.3 Inspections, Tests, Analyses, and Acceptance Criteria

Certain documentation of security features will be SGI, which has restricted availability under 10 CFR 73.21. The phrase "a report exists and concludes" is used in security-related ITAAC to indicate that a non-SGI executive summary with the applicable conclusions exists and will be part of the ITAAC closure. This non-SGI

executive summary is supported by a separate SGI document which contains the salient details leading to the conclusions of the non-SGI executive summary.

Table 3.1-1 lists the security ITAAC.

Table 3.1-1—Security ITAAC (47 Sheets)

	Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1.1	Vital equipment is located only within a vital area.	Inspections of vital equipment will be performed. ~~to confirm that vital equipment is located within a vital area.~~	~~A report exists and concludes that v~~Vital equipment is located only within a vital area.
1.2	Isolation zones and exterior areas within the protected area are provided with illumination to permit assessment in the isolation zones and observation of activities within exterior areas of the protected area. ~~observation of abnormal presence or activity of persons or vehicles.~~	Tests, ~~I~~inspections, or a combination of tests and inspections of the illumination in the isolation zones and external areas ~~of~~ within the protected area will be performed. ~~to confirm sufficient illumination to permit observation.~~	~~A report exists and concludes that i~~Illumination in isolation zones and exterior areas within the protected area is at least 0.2 foot candles measured horizontally at ground level or~~,~~ alternatively augmented~~,~~ sufficient to permit assessment and observation.
1.3	The external walls, doors, ceiling and floors in the main control room (MCR), ~~and~~ central alarm station, and secondary alarm station are bullet resistant to at least ~~a~~ Underwriter's Laboratories Inc. (UL) Ballistic Standard 752, "The Standard of Safety for Bullet-Resisting Equipment," Level 4. ~~level 4 round.~~	Type test, analysis, or a combination of type test and analysis ~~will be performed for~~ of the external walls, doors, ceilings~~,~~ and floors, ~~and any windows in the walls~~ in the MCR, ~~and~~ central alarm station, and secondary alarm station will be performed. ~~to ensure they are bullet resistant to at least a UL level 4 round.~~	A report exists and concludes that the external walls, doors, ceilings and floors in the MCR, ~~and~~ central alarm station, and secondary alarm station are bullet resistant to at least ~~a~~ UL Ballistic Standard 752, ~~l~~Level 4. ~~round.~~

Table 3.1-1—Security ITAAC (47 Sheets)

	Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1.4~~15~~	The ~~C~~central and secondary alarm stations are designed, equipped and constructed such that no single act, in accordance with the ~~design basis threat~~DBT of radiological sabotage, can simultaneously remove the ability of both the central and secondary alarm stations to (1) detect and assess alarms, (2) initiate and coordinate an adequate response to alarms, (3) summon offsite assistance, and (4) provide effective command and control.	Tests, inspections, or a combination of tests and inspections of the central and secondary alarm stations will be performed.	~~A report exists and concludes that for the as-built~~ The central and secondary alarm stations are designed, equipped, and constructed such that no single act, in accordance with the ~~design-basis threat~~ DBT of radiological sabotage, can simultaneously remove the ability of both the central and secondary alarm stations to (1) detect and assess alarms, (2) initiate and coordinate an adequate response to alarms, (3) summon offsite assistance, and (4) provide effective command and control.
1.5~~16~~	Both the central and secondary alarm stations are constructed, located, protected, and equipped to the standards for the central alarm station (alarm stations need not be identical in design but ~~each~~ shall be equal and redundant, capable of performing all functions required of alarm stations).	Tests, inspections, or a combination of tests and inspections of the central and secondary alarm stations will be performed. ~~to verify that they are capable of performing all functions required of alarm stations.~~	~~A report exists and concludes that t~~The central and secondary alarm stations are located, constructed, protected, and equipped to the standards of the central alarm station and are functionally redundant ~~capable of performing all functions required of alarm stations.~~ (Stations need not be identical in design.)
1.6~~4~~	The vehicle barrier system is designed, installed, and located at the necessary stand-off distance to protect against the DBT vehicle bombs.	Type test, inspections, analysis, or a combination of type tests, inspections and analysis of the vehicle barrier system will be performed ~~for the vehicle barrier system to ensure it will protect against the DBT vehicle bombs based upon the stand-off distance for the system.~~	A report exists and concludes that the vehicle barrier system will protect against the DBT vehicle bombs based ~~up~~on the stand-off distance for the system.

Table 3.1-1—Security ITAAC (47 Sheets)

	Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1.7	The perimeter intrusion detection system is designed to detect penetration or attempted penetration of the protected area perimeter barrier before completed penetration of the barrier, and for subsequent alarms to annunciate concurrently in at least two onsite alarm stations (central and secondary alarm stations).	Tests, inspections, or a combination of tests and inspections of the intrusion detection system will be performed.	The intrusion detection system can detect penetration or attempted penetration of the protected area perimeter barrier before completed penetration of the barrier, and subsequent alarms annunciate concurrently in at least two onsite alarms stations (central and secondary alarm stations).
1.8~~5~~	Unoccupied vital areas are ~~locked and alarmed with activated~~ designed with locking devices and intrusion detection devices ~~systems~~ that annunciate in the ~~C~~central and ~~S~~secondary ~~A~~alarm ~~S~~stations ~~upon intrusion into a vital area~~.	~~A t~~Tests, inspections, or a combination of tests and inspections of unoccupied vital area intrusion detection equipment and locking devices will be performed. ~~to verify that unoccupied vital areas are locked and that intrusion will be detected and annunciated in both the Central Alarm Station and Secondary Alarm Station.~~	~~A report exists and concludes that u~~Unoccupied vital areas are locked and alarmed and intrusion is detected and annunciated in both the central ~~alarm station~~ and secondary alarm stations.
1.9	The perimeter assessment equipment are designed to provide video image recording with real-time and playback capability that can provide assessment of detected activities before and after each alarm annunciation at the protected area perimeter barrier.	Tests, inspections, or a combination of tests and inspections of the video assessment equipment will be performed.	The perimeter assessment equipment is capable of real-time and playback video image recording that provides assessment of detected activities before and after each alarm annunciation at the protected area perimeter barrier.
1.10	The intrusion detection and assessment equipment at the protected area perimeter are designed to remain 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 uninterruptible power supply will be performed.	Intrusion detection and assessment equipment at the protected area perimeter remains operable from an uninterruptible power supply in the event of the loss of normal power.

Table 3.1-1—Security ITAAC (47 Sheets)

	Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1.116	Intrusion detection equipment and video assessment equipment annunciates and displays concurrently in at least two onsite alarms stations (central and secondary alarm stations).~~Security alarm annunciation occurs in the central alarm station and in at least one other continuously manned station not necessarily onsite.~~	Tests, inspections, or a combination of tests and inspections of intrusion detection equipment and video assessment equipment ~~the installed systems~~ will be performed. ~~to ensure that security alarms annunciate in the central alarm station and in at least one other continuously manned station.~~	Intrusion detection equipment and video assessment equipment annunciate and display concurrently in at least two onsite alarm stations (central and secondary alarm stations).~~A report exists and concludes that security alarms annunciate in the central alarm station and in at least one other continuously manned station.~~
1.123	Central and secondary alarm stations are located inside the protected area and are designed so that the interiors of both alarm stations are not visible from the perimeter of the protected area.	The central and secondary alarm station locations will be inspected. ~~to verify that the interiors of both alarm stations are not visible from the perimeter of the protected area. .~~	~~A report exists and concludes that t~~The ~~as-built~~ central and secondary alarm stations are located inside the protected area, and the interiors of both alarm stations are not visible from the perimeter of the protected area.
1.134	The alarm system does 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 operator in the other alarm station.	Tests, inspections, or a combination of tests and inspections of intrusion detection equipment and access control equipment will be performed.	~~A report exists and concludes that the as-built~~ The alarm system ~~will~~ does 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 operator in the other alarm station.
1.14	Intrusion detection and assessment systems are designed to provide visual display and audible annunciation of alarms in both the central and secondary alarm stations.	Intrusion detection and assessment systems will be tested.	The intrusion detection systems provide a visual display and audible annunciation of all alarms concurrently in at least two onsite alarms stations (central and secondary alarm stations).

Table 3.1-1—Security ITAAC (47 Sheets)

	Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1.157	The Ssecondary security power supply system for alarm annunciator equipment and non-portable communications equipment is located within a vital area.	The secondary security power supply system will be inspected.An inspection will be performed to ensure that the location of the secondary security power supply system for alarm annunciator equipment and non-portable communications equipment is within a vital area.	A report exists and concludes that tThe secondary security power system for alarm annunciator equipment and non-portable communications equipment is located within a vital area.
1.16	Nonportable communications equipment in the central and secondary alarm stations remains operable from an independent power source in the event of loss of normal power.	Tests, inspections, or a combination of tests and inspections of the nonportable communications equipment will be performed.	All nonportable communication devices (including conventional telephone systems) in the central and secondary alarm stations are wired to an independent power supply that enables those systems to remain operable (without disruption) during the loss of normal power.
1.178	Security alarm devices, including transmission lines to annunciators, are tamper-indicating and self-checking, (e.g. an automatic indication is provided when failure of the alarm system or a component occurs or when on standby power), and alarm annunciation indicates the type of alarm, (e.g., intrusion alarms, emergency exit alarm, etc.) and location.	Security alarm devices and transmission lines will be tested.A test will be performed to verify that security alarms including transmission lines to annunciators are tamper indicating and self-checking, (e.g. an automatic indication is provided when failure of the alarm system or a component occurs, or when on standby power) and that alarm annunciation indicates the type of alarm, (e.g., intrusion alarms, emergency exit alarm, etc.) and location.	A report exists and concludes that sSecurity alarm devices including transmission lines to annunciators are tamper-indicating and self-checking; (e.g., an automatic indication is provided when failure of the alarm system or a component occurs, or when the system is on standby power); and that the alarm annunciation indicates the type of alarm, (e.g., intrusion alarms, emergency exit alarm, etc.) and location.

Table 3.1-1—Security ITAAC (47 Sheets)

	Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1.189	~~The security alarm system will~~ Intrusion detection systems recording equipment records ~~each~~ onsite security alarm annunciation including the location of the alarm, ~~any~~ false alarm, alarm check, and tamper indication ~~by recording~~ and the ~~alarm~~ type of alarm, location, alarm circuit, ~~location,~~ date, and time.	The intrusion detection systems recording equipment will be tested. ~~Tests will be performed to ensure that equipment is capable of recording each onsite security alarm annunciation including the location of the alarm, false alarm, alarm check, and tamper indication and the type of alarm, location, alarm circuit, date, and time.~~	~~A report exists and concludes that the security alarm system will record~~ Intrusion detection systems recording equipment is capable of recording each onsite security alarm annunciation including the location of the alarm, ~~any~~ false alarm, alarm check, and tamper indication ~~by recording~~ and the ~~alarm~~ type of alarm, location, alarm circuit, ~~location,~~ date, and time.
1.1910	Emergency exits through the vital area boundaries are alarmed with intrusion detection devices and secured by locking devices that allow prompt egress during an emergency.	Tests, inspections, or a combination of tests and inspections ~~will be performed to verify that~~ of emergency exits through the vital area boundaries will be performed. ~~are alarmed.~~	~~A report exists and concludes that e~~Emergency exits through the vital area boundaries~~y~~ are alarmed with intrusion detection devices and secured by locking devices that allow prompt egress during an emergency.
1.2011	The ~~C~~central and secondary alarm stations have conventional (land line) telephone service ~~and other communication capabilities~~ with the control room and local law enforcement authorities.	Tests, inspections, or a combination of tests and inspections of the central and secondary alarm stations' conventional (land line) telephone service will be performed. ~~to verify that the alarm stations are equipped with conventional (land line) telephone service and other capability to communicate with local law enforcement authorities.~~	~~A report exists and concludes that t~~The central and secondary alarm stations are equipped with conventional (land line) telephone service ~~and other capability to communicate~~ with the control room and local law enforcement authorities.

Table 3.1-1—Security ITAAC (47 Sheets)

	Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1.21~~12~~	The ~~C~~central and secondary alarm stations are capable of continuous communication with on-duty security force personnel.	Tests, inspections, or a combination of tests and inspections of the central and secondary alarm stations' continuous communication capabilities will be performed~~. to verify that the alarm stations are equipped with the capability to continuously communicate with security officers, watchmen or armed response individuals, or other security personnel that have responsibilities during a contingency event.~~	~~A report exists and concludes that t~~The central and secondary alarm stations are capable of continuous communication ~~equipped with the capability to continuously communicate~~ with on-duty watchmen, armed security officers, ~~watchmen or~~ armed respond~~s~~ers ~~individuals~~, or other security personnel who ~~that~~ have responsibilities within the physical protection program and during ~~a~~ contingency response events.