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Your ref: Docket Number 52-006
Our ref: DCP/NRC2222

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Subject: AP1000 DCD Impact Document Submittal of APP-GW-GLE-034, Revision 0

Westinghouse is submitting Revision 0 of APP-GW-GLE-034, "Security Related ITAAC Changes." The purpose of this report is to identify changes to the AP1000 Design Control Document (DCD). These changes are being made to reflect the industry standard security ITAACs in order to align with SRP Section 14.3.12.

This report is submitted in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information provided in this report is generic and is expected to apply to all Combined Operating License (COL) applicants referencing the AP1000 Design Certification and the AP1000 Design Certification Amendment Application.

Pursuant to 10 CFR 50.30(b), APP-GW-GLE-034, Revision 0, "Security Related ITAAC Changes," is submitted as Enclosure 1.

Questions or requests for additional information related to the content and preparation of this report should be directed to Westinghouse. Please send copies of such questions or requests to the prospective applicants for combined licenses referencing the AP1000 Design Certification. A representative for each applicant is included on the cc: list of this letter.

Very truly yours,

Robert Sisk

Robert Sisk, Manager
Licensing and Customer Interface
Regulatory Affairs and Standardization

/Enclosure

1. APP-GW-GLE-034, Revision 0, "Security Related ITAAC Changes"

D063
NRO

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ENCLOSURE 1

APP-GW-GLE-034

Revision 0

"Security Related ITAAC Changes"

AP1000 DOCUMENT COVER SHEET

TDC: ______ Permanent File: ______

AP1000 DOCUMENT NO.	REVISION	PAGE	ASSIGNED TO	OPEN ITEMS (Y/N)
APP-GW-GLE-034	0	1 of ~~28~~ 26	W-WINTERS	N

ALTERNATE DOCUMENT NUMBER: AP 8/5/08 WORK BREAKDOWN #:

ORIGINATING ORGANIZATION: NPP - Standardization

TITLE: **Security Related ITAAC Changes**

ATTACHMENTS: None	DCP #/REV. INCORPORATED IN THIS DOCUMENT REVISION: None
CALCULATION/ANALYSIS REFERENCE: None	

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	SIGNATURE / DATE	
	SIGNATURE / DATE	
VERIFIER(S) D. Lindgren	SIGNATURE / DATE [signature] 8/5/2008	Verification Method: Independent Review

Plant Applicability: ☒ All AP1000 plants except: No Exceptions
☐ Only the following plants:

APPLICABILITY REVIEWER** J. Speer	SIGNATURE / DATE [signature] for JS 8/6/2008
RESPONSIBLE MANAGER* J. Winters	SIGNATURE / DATE [signature] 8/6/08

* Approval of the responsible manager signifies that the document and all required reviews are complete, the appropriate proprietary class has been assigned, electronic file has been provided to the EDMS, and the document is released for use.

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Brief Description of the Impact (what is being changed and why):

The AP1000 security ITAACs located in DCD section 2.6.9-1 and 3.3-6 are being changed to reflect the industry standard security ITAACs in order to align with SRP 14.3.12. As a result 3 ITAACs are being added to the 13 existing AP1000 security ITAACs, and parts of the 13 existing ITAACs are being revised to align with the standard industry security ITAACs.

SRP Section Impacted:
DCD Tier 1 Section 2.6.9 and 3.3-6 are being revised in order to align with SRP 14.3.12.

This evaluation is prepared to document the Design Control Document (DCD) change described above. The DCD change is a departure from Tier 1 information of the AP1000 DCD, Revision 16. The changes identified in this document are intended to be included in a revision to the DCD and in the review of the Design Certification amendment or included as generic information in plant specific FSARs. Changes to Tier 1 information require review and approval by the NRC.

I. TECHNICAL DESCRIPTION

There is no physical change to the design of AP1000 associated with this DCD change. This is a licensing related change associated with the ITAACs for the physical security system.

II. CHANGE JUSTIFICATION

The AP1000 physical security ITAACs are being revised to align with the industry standard security ITAACs and SRP 14.3.12.

III. REGULATORY IMPACT

A. EVALUATION OF DEPARTURE FROM TIER 2 INFORMATION (Check correct response and provide justification for that determination under each response)

10 CFR Part 52, Appendix D, Section VIII. B.5.a. provides that an applicant for a combined licensee who references the AP1000 design certification may depart from Tier 2 information, without prior NRC approval, if it does not require a license amendment under paragraph B.5.b. These questions are addressed here to provide an evaluation of the regulatory impact. Regardless of the answers to these questions these changes are being provided to the NRC for review and approval as part of the design certification amendment. Also changes to Tier 1 require NRC review and approval. The questions below address the criteria of B.5.b.

1. Does the proposed departure result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the plant-specific DCD? ☐ YES ☒ NO

The proposed change does not cause a minimal increase in the frequence of occurrence of an accident previously evaluated in the plant-specific DCD.

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2. Does the proposed departure result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety and previously evaluated in the plant-specific DCD? ☐ YES ☒ NO

The proposed change does not cause more than a minimal increase in the likelihood of occurrence of a malfunction of a SSC import to safety and previously evaluated in the plant-specific DCD.

3. Does the proposed departure Result in more than a minimal increase in the consequences of an accident previously evaluated in the plant-specific DCD? ☐ YES ☒ NO

   The proposed change does not increase the consequences of an accident previously evaluated in the plant specific DCD.

4. Does the proposed departure result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the plant-specific DCD? ☐ YES ☒ NO

   The proposed change does not cause an increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the plant-specific DCD.

5. Does the proposed departure create a possibility for an accident of a different type than any evaluated previously in the plant-specific DCD? ☐ YES ☒ NO

   The proposed change does not create a possibility for an accident of a different type other than evaluated previously in the plant-specific DCD.

6. Does the proposed departure create a possibility for a malfunction of an SSC important to safety with a different result than any evaluated previously in the plant-specific DCD? ☐ YES ☒ NO

   The proposed change does not create a possibility for a malfunction of an SSC important to safety with a different result other than evaluated previously in the plant-specific DCD.

7. Does the proposed departure result in a design basis limit for a fission product barrier as described in the plant-specific DCD being exceeded or altered? ☐ YES ☒ NO

   The proposed changed does not result in a design basis limit for a fission product barrier as described in the plant specific DCD being exceeded or altered.

8. Does the proposed departure result in a departure from a method of evaluation described in the plant-specific DCD used in establishing the design bases or in the safety analyses? ☐ YES ☒ NO

   The proposed change does not result in a departure from a method of evaluation described in the plant-specific DCD used in establishing the design bases or in the safety analyses.

B. IMPACT ON RESOLUTION OF AN EX-VESSEL SEVERE ACCIDENT ISSUE

10 CFR Part 52, Appendix D, Section VIII. B.5.a. provides that an applicant for a combined licensee who references the AP1000 design certification may depart from Tier 2 information, without prior NRC approval, if it does not require a license amendment under paragraph B.5.c. The questions below address the criteria of B.5.c.

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1. Does the proposed activity result in an impact to features that mitigate ex-vessel severe accidents. If the answer is Yes answer Questions 2 and 3 below. ☐ YES ☒ NO

   The proposed change does not result in an impact to features that mitigate ex-vessel severe accidents.

2. Is there is a substantial increase in the probability of an ex-vessel severe accident such that a particular ex-vessel severe accident previously reviewed and determined to be not credible could become credible? ☐ YES ☐ NO ☒ N/A

   The proposed change does not cause an increase in the probability of an ex-vessel severe accident.

3. Is there is a substantial increase in the consequences to the public of a particular ex-vessel severe accident previously reviewed? ☐ YES ☐ NO ☒ N/A

   The proposed change does not increase the consequences to the public of a particular ex-vessel severe accident previously reviewed.

C. SECURITY ASSESSMENT

1. Does the proposed change have an adverse impact on the security assessment of the AP1000. ☐ YES ☒ NO

   The proposed change does not have an adverse impact on the security assessment for AP1000.

D. OTHER REGULATORY CRITERIA

The AP1000 ITAACs are being revised to align with the industry standard security ITAACs and SRP 14.3.12. The following is a conformance evaluation for each of the 16 SRP security ITAACs relative to the AP1000 ITAACs which are contained in Tier 1 section 2.6.9 and section 3.3-6 of the DCD.

AP1000 physical security ITAAC number 1 conforms with SRP ITAAC number 6 except that is has been revised to specify that walls, doors, ceiling and floors in the main control room central alarm station, and the last access to the protected area are bullet resistant to a <u>at least</u> UL level 4 round as requested by the NRC.

AP1000 physical security ITAAC number 2 has been deleted as it is neither included nor required by the industry standard security ITAACs or SRP 14.3.12. It has been replaced by the industry standard ITAAC related to SRP ITAAC number 2 with one clarification. The wording of the *Inspection, Tests, Analyses* and *Acceptance Criteria* has been clarified to state that the physical barriers at the perimeter of the protected area barrier are separated from any other barrier designated as a <u>vital area</u> barrier. The SRP states that they are separated from any other barrier designated as a physical barrier.

AP1000 physical security ITAAC number 3 aligns with SRP ITAAC number 12. The AP1000 *Inspection, Test, Analysis* and *Acceptance Criteria* have been revised to match the agreed upon industry standard ITAACs, which removes the *Inspection, Test, Analysis* and *Acceptance Criteria* related to system capacity and capability. The capacity and capability of the equipment is required by and inspected to the plant specific physical security plan and should not be included in the ITAACs.

AP1000 ITAAC number 4 conforms to SRP ITAAC number 10.

AP1000 physical security ITAAC number 5 has been deleted as it is neither included nor required by the industry standard security ITAACs or SRP 14.3.12. It has been replaced by the industry standard ITAAC that aligns to SRP ITAAC number 11. This ITAAC conforms to SRP ITAAC number 11 with the exception. It delineates that only security alarms annunciate in the central alarm station and one other continuously manned station.

AP1000 physical security ITAAC number 6 aligns with SRP ITAAC number 7. This ITAAC conforms to the SRP with the exception that the *Inspection, Test, Analysis* and *Acceptance Criteria* have been modified to add specificity regard the design criteria being sufficient stand-off distance against the design basis threat vehicle bombs.

AP1000 physical security ITAAC number 7 has been revised, and it aligns with SRP ITAAC number 7. This ITAAC conforms to the SRP with the exception that the *Inspection, Test, Analysis* and *Acceptance Criteria* have been modified to reference the applicable wall thicknesses for the vital area walls as described in Tier 1 Section 3.3 of the DCD.

AP1000 physical security ITAAC number 8 has been revised, and it aligns with SRP ITAAC number 5. This ITAAC conforms to the SRP with the exception that the *Acceptance Criteria* have been modified to add specificity regarding the illumination requirements for the protected area.

AP1000 physical security ITAAC number 9 aligns with SRP ITAAC number 15. This ITAAC conforms to the SRP with the exception that it has been modified to specify that the emergency exits through the protected area perimeter and vital area boundary are alarmed.

AP1000 physical security ITAAC number 10 has been revised, and it conforms to SRP ITAAC number 4.

AP1000 physical security ITAAC number 11 has been revised, and it aligns with SRP ITAAC number 9. This ITAAC conforms to the SRP with the exception that it has been modified from the SRP to emphasis the access authorization system not the picture badge.

AP1000 physical security ITAAC number 12 has been revised, and it aligns with SRP ITAAC number 8. This ITAAC conforms to the SRP with the exception that it has been modified from the SRP to specifically state that detection equipment is located at access points to the protected area.

AP1000 physical security ITAAC number 13 has been revised, and it aligns with SRP ITAAC number 16. This ITAAC conforms to the SRP with the exception that it has been modified from the SRP to specifically state that central and secondary alarm stations have conventional communication capabilities with local law enforcement.

An additional ITAAC has been added to the AP1000 physical security ITAACs that aligns with SRP ITAAC number 3. This ITAAC conforms to the SRP with the exception that it has been modified from the SRP to specifically state that the isolation zones allow 20 feet of observation on either side of the barrier.

An additional ITAAC has been added to the AP1000 physical security ITAACs that aligns with SRP ITAAC number 13. This ITAAC conforms to the SRP with the exception that it has been modified from the SRP to specifically state that security alarms are tamper indicating and self checking and that security alarm annunciation indicates the type of alarm and location.

An additional ITAAC has been added to the AP1000 physical security ITAACs that aligns with SRP ITAAC number 14. This ITAAC conforms to the SRP with the exception that it has been modified from the SRP to specifically state that equipment exist to record onsite security alarms.

The following table summarizes which AP1000 ITAAC aligns with the corresponding ITAAC from SRP 14.3.12 as discussed above:

AP1000 Physical Security ITAAC Number from DCD Tier 1, Section 2.6.9	Corresponding ITAAC from SRP 14.3.12
1	6
2	2
3	12
4	10
5	11
6	7
7	1
8	5
9	15
10	4
11	9
12	8
13	16
14	3
15	13
16	14

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IV. DCD MARK-UP

Deletions are shown with strikeouts and additions are underlined.

2.6.9 Plant Security System
Design Description

The physical security system provides physical features to detect, delay, assist response to, and defend against the design basis threat (DBT) for radiological sabotage. The physical security system consists of physical barriers and an intrusion detection system. The details of the physical security system are categorized as Safeguards Information. The physical security system provides protection for vital equipment and plant personnel.

1. The external walls, doors, ceiling, and floors in the main control room, central alarm station, and the last access control function for access to the protected area ~~secondary alarm station~~ are bullet-resistant to at least a UL level 4 round.

2. Physical barriers for the protected area perimeter are not part of the vital area barriers. ~~Central Alarm Station and main control room are vital areas.~~

3. Secondary security power supply system for alarm annunciator equipment and non-portable communications equipment is located within a vital area.

4. Vital areas are locked and alarmed with active intrusion detection systems that annunciate in the central and secondary alarm stations upon intrusion into a vital area.

5. Security alarm annunciation occurs in the central alarm station and in at least one other continuously manned station not necessarily onsite. ~~The locks used for the protection of the vital area are manipulative resistant.~~

6. The vehicle barrier system is installed and located at the necessary stand-off distance to protect against the DBT vehicle bomb.

7. Vital equipment is located only within a ~~defined~~ vital area. Access to vital equipment requires passage through ~~which is protected by~~ at least two physical barriers.

8. Isolation zones and ~~all~~ exterior areas within the protected area are provided with illumination to permit observation of abnormal presence or activity of persons or vehicles.

9. Emergency exits through ~~in~~ the protected area perimeter and the vital area boundaries are alarmed.

10. An intrusion detection system ~~is installed to~~ can detect penetration or attempted penetration of the protected area barrier ~~and the vital area portals~~.

11. An access control system with numbered picture badges is installed for use by individuals who are authorized access to ~~identify and authorize personnel entering the~~ protected areas without escort.

12. ~~One or more~~ Access control points are established to (a) control ~~monitor all~~ vehicle and personnel access into the protected area (b) detect firearms, explosives, and incendiary devices at the protected area personnel access pionts.

13. The central and secondary alarm stations: (a) have conventional (land line) telephone service and other communication capabilities with local law enforcement authorities and (b) are capable of continuous communications with security personnel.

14. Isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area that allows 20 feet of observation on either side of the barrier.

15. 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.) Alarm annunciation shall indicate the type of alarm, (e.g., intrusion alarms, emergency exit alarm, etc.) and location.

16. Equipment exists to record 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.

Inspections, Tests, Analyses, and Acceptance Criteria

Table 2.6.9-1 specifies the inspections, tests, analyses, and associated acceptance criteria for the physical security system.

Table 2.6.9-1
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. The external walls, doors, ceiling, and floors in the main control room, central alarm station, and the last access control function for access to the protected area ~~secondary alarm station~~ are bullet-resistant to at least a UL level 4 round.	See Tier 1 Material, Table 3.3-6, item 14.	See Tier 1 Material, Table 3.3-6, item 14.
2. Physical barriers for the protected area perimeter are not part of the vital area barrier. ~~Central Alarm Station and main control room are vital areas.~~	An inspection of the protected area perimeter barrier will be performed to verify that physical barriers at the perimeter of the protected area are separated from any other barrier designated as a vital area barrier. ~~See Tier 1 Material, Table 3.3-6, item 15.~~	Physical barriers at the perimeter of the protected area are separated from any other barrier designated as a vital area barrier. ~~See Tier 1 Material, Table 3.3-6, item 15.~~

Table 2.6.9-1
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
3. Secondary security power supply system for alarm annunciator equipment and non-portable communications equipment is located within the vital area.	See Tier 1 Material, Table 3.3-6, item 16.	See Tier 1 Material, Table 3.3-6, item 6.
4. Vital areas are locked and alarmed with active intrusion detection systems that annunciate in the central and secondary alarm stations upon intrusion into a vital area.	See Tier 1 Material, Table 3.3-6, item 17.	See Tier 1 Material, Table 3.3-6, item 17.
5. Security alarm annunciation occurs in the central alarm station and in at least one other continuously manned station not necessarily onsite. ~~The locks used for the protection of the vital areas are manipulative resistant.~~	Test, inspection or a combination of test and inspections of 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. ~~See Tier 1 Material, Table 3.3-6, item 18.~~	Security alarms annunciate in the continuously manned central alarm station located within the protected area and in at least one other continuously manned station. ~~See Tier 1 Material, Table 3.3-6, item 18.~~
6. The vehicle barrier system is installed and located at the necessary stand-off distance to protect against the DBT vehicle bombs.	Type test, analysis, or a combination of type test and analysis will be performed for the vehicle barrier system to ensure it will ~~used to~~ 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 upon the stand-off distance for the system.

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Table 2.6.9-1
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7. Vital Equipment: (a)Vital equipment is located only within a ~~defined~~ vital area. (b)Access to vital equipment requires passage through ~~which is protected by~~ at least two physical barriers.	*i.* Inspection will be performed to confirm ~~of the equipment on the vital equipment list confirms~~ that vital equipment is located within a vital area. ~~it is within a vital area boundary~~. *ii.* Inspection will be ~~is~~ performed to confirm that access to vital equipment requires passage through at least ~~there are~~ two physical barriers ~~between the inside of a vital area and the outside of the protected area boundary~~	*i.* All vital equipment is located only within ~~in~~ a vital area. *ii.* Access to vital equipment requires passage through at least ~~There are~~ two physical barriers ~~between the inside of a vital area and the outside of the protected area boundary~~.
8. Isolation zones and ~~all~~ exterior areas within the protected area are provided with illumination to permit observation of abnormal presence or activity of persons or vehicles.	Inspection of the illumination in the isolation zones and external areas of the protected are will be performed to confirm sufficient illumination to permit observation ~~exterior area within the protected area confirms illumination to permit observation and detection per design~~.	The illumination in isolation zones and exterior areas within ~~the exterior portion of~~ the protected area is 0.2 foot candles measured horizontally at ground level or, alternatively, sufficient to permit observation ~~and detection~~.
9. Emergency exits through ~~in~~ the protected area perimeter and the vital area boundaries are alarmed.	Test, inspection or a combination of tests and inspections will be ~~A test is~~ performed to verify that the emergency exits through ~~for~~ the protected area perimeter and the vital area boundaries are alarmed.	The emergency exits through ~~from~~ the protected area perimeter and the vital area boundaries are alarmed.

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Table 2.6.9-1
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
10. An intrusion detection system ~~is installed to~~ can detect penetration or attempted penetration of the protected area barrier ~~and the vital area portals~~.	Tests, inspections or a combination of tests and inspections of ~~are performed for~~ the intrusion detection system will be performed ~~used~~ to verify the system can detect penetration or attempted penetration of the protected area barrier and that subsequent alarms annunciate in both the Central Alarm Station and Secondary Alarm Station. ~~detect penetration or attempted penetration of the protected area barrier and the vital area portals.~~	The intrusion detection system detects penetration or attempted penetration of the protected area barrier and subsequent alarms annunciate in the Central Alarm Station and Secondary Alarm Station. ~~annunciates in the central and secondary alarm stations upon penetration or attempted penetration into the protected area barrier or the vital area portals~~.
11. An access control system with numbered picture badges is installed for use by individuals who are authorized access to ~~identify and authorize personnel entering the~~ protected areas without escort.	A test of the access control system with numbered picture badges will be performed to verify that unescorted access to protected areas is granted only to authorized personnel. ~~is performed.~~	An access authorization system with numbered picture badges can identify and authorize protected area access only to those personnel with unescorted access authorization. ~~The access control system can identify and authorize personnel entering the protected area.~~
12. ~~One or more~~ Access control points are established to (a) Control ~~monitor all~~ vehicle and personnel access into the protected area (b) Detect firearms, explosives, and incendiary devices at the protected area personnel access points.	~~An inspection is performed to verify control point[s] to the protected area exists.~~ A test, inspection, or combination of tests and inspections of installed systems and equipment will be performed to verify that access control points to the protected area exist and that: (a) Personnel and vehicle access into the protected area is controlled. (b) Detection equipment is capable of detecting explosives, incendiary devices, and firearms at the protected area personnel access points.	~~One or more access control points to the protected area are established.~~ A report exists and concludes that: (a) Access points for the protected area are configured to control access. (b) Detection equipment is capable of detecting firearms, incendiary devices, and explosives at the protected personnel access points.

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Table 2.6.9-1
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
13. The central and secondary alarm stations (a) have conventional (land line) telephone service and other communication capabilities with local law enforcement authorities and (b) are capable of continuous communications with security personnel.	Test, inspection, analysis or a combination of test, inspection and analysis will be performed to verify that the alarm stations: (a) are equipped with conventional (land line) telephone service and other capability to communicate with local law enforcement authorities; and (b) are equipped with the capability to continuously communicate with each security officer, watchman or armed response individual, or any security personnel that have responsibilities during a contingency event. ~~Inspection of the central and secondary alarm stations confirms that each is equipped with the capability to communicate with local law enforcement authorities.~~	A report exists and concludes that the alarm stations: (a) are equipped with conventional (land line) telephone service and other capability to communicate with local law enforcement authorities; and (b) are equipped with the capability to continuously communicate with each security officer, watchman or armed response individual, or any security personnel that have responsibilities during a contingency event. ~~The central and secondary alarm stations have communication capabilities with local law enforcement authorities.~~
14. Isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area that allow 20 feet of observation on either side of the barrier. Where permanent buildings do not allow a 20 foot observation distance on the inside of the protected area, the building walls are immediately adjacent to, or an integral part of, the protected area barrier.	An inspection of the isolation zone will be performed to verify that the isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area and allow 20 feet of observation of the activities of people on either side of the barrier except where permanent buildings do not allow a 20 foot observation distance on the inside of the protected area barrier, the inspection will confirm that the building walls are immediately adjacent to, or an integral part of, the protected area barrier.	A report exists and concludes that isolation zones exist in outdoor areas adjacent to the physical barrier at the perimeter of the protected area and allow 20 feet of observation of the activities of people on either side of the barrier. Where permanent buildings do not allow a 20 foot observation on the inside of the protected area, the building walls are immediately adjacent to, or an integral part of, the protected area barrier and the 20 foot observation distance does not apply.

Table 2.6.9-1
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
15. 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.) Alarm annunciation shall indicate the type of alarm, (e.g., intrusion alarms, emergency exit alarm, etc.) and location.	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 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 the system is on standby power) and that alarm annunciation indicates the type of alarm, (e.g., intrusion alarms, emergency exit alarm, etc.) and location.
16. Equipment exists to record 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.	Test, analysis or a combination of test and analysis 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 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.

3.3 Buildings

Design Description

The nuclear island structures include the containment (the steel containment vessel and the containment internal structure) and the shield and auxiliary buildings. The containment, shield and auxiliary buildings are structurally integrated on a common basemat which is embedded below the finished plant grade level. The containment vessel is a cylindrical welded steel vessel with elliptical upper and lower heads, supported by embedding a lower segment between the containment internal structures concrete and the basemat concrete. The containment internal structure is reinforced concrete with structural modules used for some walls and floors. The shield building is reinforced concrete and, in conjunction with the internal structures of the containment building, provides shielding for the reactor coolant system and the other radioactive systems and components housed in the containment. The shield building roof is a reinforced concrete structure containing an integral, steel lined passive containment cooling water storage tank. The auxiliary building is reinforced concrete and houses the safety-related mechanical and electrical equipment located outside the containment and shield buildings.

The portion of the annex building adjacent to the nuclear island is a structural steel and reinforced concrete seismic Category II structure and houses the control support area, non-1E electrical equipment, and hot machine shop.

The radwaste building is a steel framed structure and houses the low level waste processing and storage.

The turbine building is a non-safety related structure that houses the main turbine generator and the power conversion cycle equipment and auxiliaries. There is no safety-related equipment in the turbine building. The turbine building is located on a separate foundation. The turbine building structure is adjacent to the nuclear island structures.

The diesel generator building is a non-safety related structure that houses the two standby diesel engine powered generators and the power conversion cycle equipment and auxiliaries. There is no safety-related equipment in the diesel generator building. The diesel generator building is located on a separate foundation at a distance from the nuclear island structures.

The plant gas system (PGS) provides hydrogen, carbon dioxide, and nitrogen gases to the plant systems as required. The component locations of the PGS are located either in the turbine building or the yard areas.

1. The physical arrangement of the nuclear island structures and the annex building is as described in the Design Description of this Section 3.3, and as shown on Figures 3.3-1 through 3.3-14. The physical arrangement of the radwaste building, the turbine building, and the diesel generator building is as described in the Design Description of this Section 3.3.

2. a) The nuclear island structures, including the critical sections listed in Table 3.3-7, are seismic Category I and are designed and constructed to withstand design basis loads, as specified in the Design Description, without loss of structural integrity and the safety-related functions. The design bases loads are those loads associated with:

    - Normal plant operation (including dead loads, live loads, lateral earth pressure loads, and equipment loads, including hydrodynamic loads, temperature and equipment vibration);
    - External events (including rain, snow, flood, tornado, tornado generated missiles and earthquake); and

- Internal events (including flood, pipe rupture, equipment failure, and equipment failure generated missiles).

b) Site grade level is located relative to floor elevation 100′-0″ per Table 3.3-5. Floor elevation 100′-0″ is defined as the elevation of the floor at design plant grade.

c) The containment and its penetrations are designed and constructed to ASME Code Section III, Class MC.[1]

d) The containment and its penetrations retain their pressure boundary integrity associated with the design pressure.

e) The containment and its penetrations maintain the containment leakage rate less than the maximum allowable leakage rate associated with the peak containment pressure for the design basis accident.

f) The key dimensions of the nuclear island structures are as defined on Table 3.3-5.

g) The containment vessel greater than 7 feet above the operating deck provides a heat transfer surface. A free volume exists inside the containment shell above the operating deck.

h) The containment free volume below elevation 108′ provides containment floodup during a postulated loss-of-coolant accident.

3. Walls and floors of the nuclear island structures as defined on Table 3.3-1, except for designed openings and penetrations, provide shielding during normal operations.

4. a) Walls and floors of the annex building as defined on Table 3.3-1, except for designed openings and penetrations, provide shielding during normal operations.

b) The walls on the outside of the waste accumulation room in the radwaste building provide shielding from accumulated waste.

c) The walls on the outside of the packaged waste storage room in the radwaste building provide shielding from stored waste.

5. a) Exterior walls and the basemat of the nuclear island have a water barrier up to site grade.

b) The boundaries between mechanical equipment rooms and the electrical and instrumentation and control (I&C) equipment rooms of the auxiliary building as identified in Table 3.3-2 are designed to prevent flooding of rooms that contain safety-related equipment up to the maximum flood level for each room defined in Table 3.3-2.

c) The boundaries between the following rooms, which contain safety-related equipment – passive core cooling system (PXS) valve/accumulator room A (11205), PXS valve/accumulator room B (11207), and

1. Containment isolation devices are addressed in subsection 2.2.1, Containment System.

chemical and volume system (CVS) room (11209) – are designed to prevent flooding between these rooms.

6. a) The radiologically controlled area of the auxiliary building between floor elevations 66'-6" and 82'-6" contains adequate volume to contain the liquid volume of faulted liquid radwaste system (WLS) storage tanks. The available room volumes of the radiologically controlled area of the auxiliary building between floor elevations 66'-6" and 82'-6" exceeds the volume of the liquid radwaste storage tanks (WLS-MT-05A, MT-05B, MT-06A, MT-06B, MT-07A, MT-07B, MT-07C, MT-11).

   b) The radwaste building packaged waste storage room has a volume greater than or equal to 1293 cubic feet.

7. a) Class 1E electrical cables, fiber optic cables associated with only one division, and raceways are identified according to applicable color-coded Class 1E divisions.

   b) Class 1E divisional electrical cables and communication cables associated with only one division are routed in their respective divisional raceways.

   c) Separation is maintained between Class 1E divisions in accordance with the fire areas as identified in Table 3.3-3.

   d) Physical separation is maintained between Class 1E divisions and between Class 1E divisions and non-Class 1E cables.

   e) Class 1E communication cables which interconnect two divisions are routed and separated such that the Protection and Safety Monitoring System voting logic is not defeated by the loss of any single raceway or fire area.

8. Equipment labeled as essential targets in Table 3.3-4 and located in rooms identified in Table 3.3-4 are protected from the dynamic effects of postulated pipe breaks.

9. The reactor cavity sump has a minimum concrete thickness as shown on Table 3.3-5 between the bottom of the sump and the steel containment.

10. The shield building roof and the passive containment cooling system (PCS) storage tank support and retain the PCS water. The passive containment cooling system tank has a stainless steel liner which provides a barrier on the inside surfaces of the tank. Leak chase channels are provided over the tank boundary liner welds.

11. Deleted

12. The extended turbine generator axis intersects the shield building.

13. Separation is provided between the structural elements of the turbine, annex, and radwaste buildings and the nuclear island structure. This separation permits horizontal motion of the

buildings in a safe shutdown earthquake without impact between structural elements of the buildings.

14. The walls, doors, ceiling, and floors in the main control room, central alarm station, and secondary alarm station are bullet-resistant to at least a UL level 4 round.

15. Deleted ~~Central alarm station and main control room are vital areas.~~

16. Secondary security power supply system for alarm annunciator equipment and non-portable communications equipment is located within a vital area.

17. Vital areas are locked and alarmed with active intrusion detection systems that annunciate in the central and secondary alarm stations upon intrusion into a vital area.

18. Deleted ~~The locks used for the protection of the vital areas are manipulative-resistant.~~

Inspections, Tests, Analyses, and Acceptance Criteria

Table 3.3-6 specifies the inspections, tests, analyses, and associated acceptance criteria for the buildings.

Table 3.3-6
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
1. The physical arrangement of the nuclear island structures and the annex building is as described in the Design Description of this Section 3.3 and Figures 3.3-1 through 3.3-14. The physical arrangement of the radwaste building, the turbine building, and the diesel generator building is as described in the Design Description of this Section 3.3.	An inspection of the nuclear island structures, the annex building, the radwaste building, the turbine building, and the diesel generator building will be performed.	The as-built nuclear island structures, the annex building, the radwaste building, the turbine building, and the diesel generator building conform with the physical arrangement as described in the Design Description of this Section 3.3 and Figures 3.3-1 through 3.3-14.
2.a) The nuclear island structures, including the critical sections listed in Table 3.3-7, are seismic Category I and are designed and constructed to withstand design basis loads as specified in the Design Description, without loss of structural integrity and the safety-related functions.	i) An inspection of the nuclear island structures will be performed. Deviations from the design due to as-built conditions will be analyzed for the design basis loads.	i) A report exists which reconciles deviations during construction and concludes that the as-built nuclear island structures, including the critical sections, conform to the approved design and will withstand the design basis loads specified in the Design Description without loss of structural integrity or the safety-related functions.
	ii) An inspection of the as-built concrete thickness will be performed.	ii) A report exists that concludes that the as-built concrete thicknesses conform with the building sections defined on Table 3.3-1.
2.b) Site grade level is located relative to floor elevation 100'-0" per Table 3.3-5.	Inspection of the as-built site grade will be conducted.	Site grade is consistent with design plant grade within the dimension defined on Table 3.3-5.
2.c) The containment and its penetrations are designed and constructed to ASME Code Section III, Class MC.[2]	See Tier 1 Material, Subsection 2.2.1, Containment System.	See Tier 1 Material, Subsection 2.2.1, Containment System.

1. Containment isolation devices are addressed in subsection 2.2.1, Containment System.

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Table 3.3-6 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
2.d) The containment and its penetrations retain their pressure boundary integrity associated with the design pressure.	See Tier 1 Material, Subsection 2.2.1, Containment System.	See Tier 1 Material, Subsection 2.2.1, Containment System.
2.e) The containment and its penetrations maintain the containment leakage rate less than the maximum allowable leakage rate associated with the peak containment pressure for the design basis accident.	See Tier 1 Material, Subsection 2.2.1, Containment System.	See Tier 1 Material, Subsection 2.2.1, Containment System.
2.f) The key dimensions of nuclear island structures are defined on Table 3.3-5.	An inspection will be performed of the as-built configuration of the nuclear island structures.	A report exists and concludes that the key dimensions of the as-built nuclear island structures are consistent with the dimensions defined on Table 3.3-5.
2.g) The containment vessel greater than 7 feet above the operating deck provides a heat transfer surface. A free volume exists inside the containment shell above the operating deck.	The maximum containment vessel inside height from the operating deck is measured and the inner radius below the spring line is measured at two orthogonal radial directions at one elevation.	The containment vessel maximum inside height from the operating deck is 146'-7" (with tolerance of +12", -6"), and the inside diameter is 130 feet nominal (with tolerance of +12", -6").
2.h) The free volume in the containment allows for floodup to support long-term core cooling for postulated loss-of-coolant accidents.	An inspection will be performed of the as-built containment structures and equipment. The portions of the containment included in this inspection are the volumes that flood with a loss-of-coolant accident in passive core cooling system valve/equipment room B (11207). The in-containment refueling water storage tank volume is excluded from this inspection.	A report exists and concludes that the floodup volume of this portion of the containment is less than 73,500 ft^3 to an elevation of 108'.
3. Walls and floors of the nuclear island structures as defined on Table 3.3-1 except for designed openings or penetrations provide shielding during normal operations.	Inspection of the as-built nuclear island structures wall and floor thicknesses will be performed.	A report exists and concludes that the shield walls and floors of the nuclear island structures as defined on Table 3.3-1 except for designed openings or penetrations are consistent with the concrete wall thicknesses provided in Table 3.3-1.

Table 3.3-6 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
4.a) Walls and floors of the annex building as defined on Table 3.3-1 except for designed openings or penetrations provide shielding during normal operations.	Inspection of the as-built annex building wall and floor thicknesses will be performed.	A report exists and concludes that the shield walls and floors of the annex building as defined on Table 3.3-1 except for designed openings or penetrations are consistent with the minimum concrete wall thicknesses provided in Table 3.3-1.
4.b) Walls of the waste accumulation room in the radwaste building except for designed openings or penetrations provide shielding during normal operations.	Inspection of the as-built radwaste building wall thicknesses will be performed.	A report exists and concludes that the shield walls of the waste accumulation room in the radwaste building except for designed openings or penetrations are consistent with the minimum concrete wall thicknesses of 1'-4".
4.c) Walls of the packaged waste storage room in the radwaste building except for designed openings or penetrations provide shielding during normal operations.	Inspection of the as-built radwaste building wall thicknesses will be performed.	A report exists and concludes that the shield walls of the packaged waste storage room in the radwaste building except for the wall shared with the waste accumulation room and designed openings or penetrations are consistent with the minimum concrete wall thicknesses of 2'.
5.a) Exterior walls and the basemat of the nuclear island have a water barrier up to site grade.	An inspection of the as-built exterior walls and the basemat of the nuclear island up to floor elevation 100'-0", for application of water barrier will be performed during construction before the walls are poured.	A report exists that confirms that a water barrier exists on the nuclear island exterior walls up to site grade.
5.b) The boundaries between rooms identified in Table 3.3-2 of the auxiliary building are designed to prevent flooding of rooms that contain safety-related equipment.	An inspection of the auxiliary building rooms will be performed.	A report exists that confirms floors and walls as identified on Table 3.3-2 have provisions to prevent flooding between rooms up to the maximum flood levels for each room defined in Table 3.3-2.

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Table 3.3-6 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
5.c) The boundaries between the following rooms, which contain safety-related equipment – PXS valve/accumulator room A (11205), PXS valve/accumulator room B (11207), and CVS room (11209) – are designed to prevent flooding between these rooms.	An inspection of the boundaries between the following rooms which contain safety-related equipment – PXS Valve/ Accumulator Room A (11205), PXS Valve/Accumulator Room B (11207), and CVS Room (11209) – will be performed.	A report exists that confirms that flooding of the PXS Valve/ Accumulator Room A (11206), and the PXS/Accumulator Room B (11207) is prevented to a maximum flood level as follows: PXS A 110'-2", PXS B 110'-1"; and of the CVS room (11209) to a maximum flood level of 110'-0".
6.a) The available room volumes of the radiologically controlled area of the auxiliary building between floor elevations 66'-6" and 82'-6" exceed the volume of the liquid radwaste storage tanks (WLS-MT-05A, MT-05B, MT-06A, MT-06B, MT-07A, MT-07B, MT-07C, MT-11).	An inspection will be performed of the as-built radiologically controlled area of the auxiliary building between floor elevations 66'-6" and 82'-6" to define volume.	A report exists and concludes that the as-built available room volumes of the radiologically controlled area of the auxiliary building between floor elevations 66'-6" and 82'-6" exceed the volume of the liquid radwaste storage tanks (WLS-MT-05A, MT-05B, MT-06A, MT-06B, MT-07A, MT-07B, MT-07C, MT-11).
6.b) The radwaste building package waste storage room has a volume greater than or equal to 1293 cubic feet.	An inspection of the radwaste building packaged waste storage room (50352) is performed.	The volume of the radwaste building packaged waste storage room (50352) is greater than or equal to 1293 cubic feet.
7.a) Class 1E electrical cables, communication cables associated with only one division, and raceways are identified according to applicable color-coded Class 1E divisions.	Inspections of the as-built Class 1E cables and raceways will be conducted.	Class 1E electrical cables, communication cables associated with only one division, and raceways are identified by the appropriate color code.
7.b) Class 1E divisional electrical cables and communication cables associated with only one division are routed in their respective divisional raceways.	Inspections of the as-built Class 1E divisional cables and raceways will be conducted.	Class 1E electrical cables and communication cables associated with only one division are routed in raceways assigned to the same division. There are no other safety division electrical cables in a raceway assigned to a different division.

Table 3.3-6 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
7.c) Separation is maintained between Class 1E divisions in accordance with the fire areas as identified in Table 3.3-3.	i) Inspections of the as-built Class 1E division electrical cables, communication cables associated with only one division, and raceways located in the fire areas identified in Table 3.3-3 will be conducted.	i) Results of the inspection will confirm that the separation between Class 1E divisions is consistent with Table 3.3-3.
	ii) Inspections of the as-built fire barriers between the fire areas identified in Table 3.3-3 will be conducted.	ii) Results of the inspection will confirm that fire barriers exist between Class 1E divisions consistent with the fire areas identified in Table 3.3-3.
7.d) Physical separation is maintained between Class 1E divisions and between Class 1E divisions and non-Class 1E cables.	Inspections of the as-built Class 1E raceways will be performed to confirm that the separation between Class 1E raceways of different divisions and between Class 1E raceways and non-Class 1E raceways is consistent with the following: – Within the main control room and remote shutdown room, the minimum vertical separation is 3 inches and the minimum horizontal separation is 1 inch.	Results of the inspection will confirm that the separation between Class 1E raceways of different divisions and between Class 1E raceways and non-Class 1E raceways is consistent with the followings: – Within the main control room and remote shutdown room, the vertical separation is 3 inches or more and the horizontal separation is 1 inch or more.

Table 3.3-6 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
	– Within other plant areas (limited hazard areas), the minimum separation is defined by one of the following: 1) The minimum vertical separation is 5 feet and the minimum horizontal separation is 3 feet. 2) The minimum vertical separation is 12 inches and the minimum horizontal separation is 6 inches for raceways containing only instrumentation and control and low-voltage power cables <2/0 AWG. 3) For configurations that involve exclusively limited energy content cables (instrumentation and control), the minimum vertical separation is 3 inches and the minimum horizontal separation is 1 inch. 4) For configurations involving an enclosed raceway and an open raceway, the minimum vertical separation is 1 inch if the enclosed raceway is below the open raceway. 5) For configuration involving enclosed raceways, the minimum separation is 1 inch in both horizontal and vertical directions.	– Within other plant areas (limited hazard areas), the separation meets one of the following: 1) The vertical separation is 5 feet or more and the horizontal separation is 3 feet or more except. 2) The minimum vertical separation is 12 inches and the minimum horizontal separation is 6 inches for raceways containing only instrumentation and control and low-voltage power cables <2/0 AWG. 3) For configurations that involve exclusively limited energy content cables (instrumentation and control), the minimum vertical separation is 3 inches and the minimum horizontal separation is 1 inch. 4) For configurations that involve an enclosed raceway and an open raceway, the minimum vertical separation is 1 inch if the enclosed raceway is below the raceway. 5) For configurations that involve enclosed raceways, the minimum vertical and horizontal separation is 1 inch.

Table 3.3-6 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
	– Where minimum separation distances are not maintained, the circuits are run in enclosed raceways or barriers are provided. – Separation distances less than those specified above and not run in enclosed raceways or provided with barriers are based on analysis – Non-Class 1E wiring that is not separated from Class 1E or associated wiring by the minimum separation distance or by a barrier or analyzed is considered as associated circuits and subject to Class 1E requirements.	– Where minimum separation distances are not met, the circuits are run in enclosed raceways or barriers are provided. – A report exists and concludes that separation distances less than those specified above and not provided with enclosed raceways or barriers have been analyzed. – Non-Class 1E wiring that is not separated from Class 1E or associated wiring by the minimum separation distance or by a barrier or analyzed is treated as Class 1E wiring.
7.e) Class 1E communication cables which interconnect two divisions are routed and separated such that the Protection and Safety Monitoring System voting logic is not defeated by the loss of any single raceway or fire area.	Inspections of the as-built Class 1E communication cables will be conducted.	Class 1E communication cables which interconnect two divisions are routed and separated such that the Protection and Safety Monitoring System voting logic is not defeated by the loss of any single raceway or fire area.
8. Equipment labeled as essential targets in Table 3.3-4 and located in rooms identified in Table 3.3-4 are protected from the dynamic effects of postulated pipe breaks.	An inspection will be performed of the as-built high energy pipe break pipe whip restraints features for systems located in rooms identified in Table 3.3-4.	An as-built Pipe Rupture Hazard Analysis Report exists and concludes that equipment labeled as essential targets in Table 3.3-4 and located in rooms identified in Table 3.3-4 can withstand the effects of postulated pipe rupture without loss of required safety function.
9. The reactor cavity sump has a minimum concrete thickness as shown in Table 3.3-5 between the bottom of the sump and the steel containment.	An inspection of the as-built containment building internal structures will be performed.	A report exists and concludes that the reactor cavity sump has a minimum concrete thickness as shown on Table 3.3-5 between the bottom of the sump and the steel containment.

Table 3.3-6 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
10. The shield building roof and PCS storage tank support and retain the PCS water sources. The PCS storage tank has a stainless steel liner which provides a barrier on the inside surfaces of the tank. Leak chase channels are provided on the tank boundary liner welds.	i) A test will be performed to measure the leakage from the PCS storage tank based on measuring the water flow out of the leak chase collection system. ii) An inspection of the PCS storage tank exterior tank boundary and shield building tension ring will be performed before and after filling of the PCS storage tank to the overflow level. The vertical elevation of the shield building roof will be measured at a location at the outer radius of the roof (tension ring) and at a location on the same azimuth at the outer radius of the PCS water storage tank before and after filling the PCS storage tank.	i) A report exists and concludes that total water flow from the leak chase collection system does not exceed 10 gal/hr. ii) A report exists and concludes that there is no visible water leakage from the PCS storage tank and that inspection and measurement of the structure before and after filling of the tank shows structural behavior under normal loads to be acceptable.
11. Deleted		
12. The extended turbine generator axis intersects the shield building.	An inspection of the as-built turbine generator will be performed.	The extended axis of the turbine generator intersects the shield building.
13. Separation is provided between the structural elements of the turbine, annex and radwaste buildings and the nuclear island structure. This separation permits horizontal motion of the buildings in the safe shutdown earthquake without impact between structural elements of the buildings.	An inspection of the separation of the nuclear island from the annex, radwaste and turbine building structures will be performed. The inspection will verify the specified horizontal clearance between structural elements of the adjacent buildings, consisting of the reinforced concrete walls and slabs, structural steel columns and floor beams.	The minimum horizontal clearance above floor elevation 100′-0″ between the structural elements of the annex and radwaste buildings and the nuclear island is 4 inches. The minimum horizontal clearance above floor elevation 100′-0″ between the structural elements of the turbine building and the nuclear island is 12 inches.

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Table 3.3-6 (cont.)
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
14. The walls, doors, ceiling, and floors in the main control room, central alarm station, and the last access control function for access to the protected area ~~secondary alarm station~~ are bullet-resistant to at least a UL level 4 round.	Type test, analysis, or a combination of type test and analysis will be performed for the walls, doors, ceilings, and floors in the main control room, central alarm station, and the last access control function for access to the protected area ~~secondary alarm station~~.	A report exists and concludes that the walls, doors, ceilings, and floors in the main control room, central alarm station, and the last access control function for access to the protected area ~~secondary alarm station~~ are bullet-resistant to at least a UL level 4 round.
~~15. Central alarm station and main control room are vital areas.~~	~~An inspection of the as-built central alarm station and main control room will be performed.~~	~~Access to the central alarm station and main control room is through an activated intrusion alarm system and at least two security hardened barriers.~~
16. Secondary security power supply system for alarm annunciator equipment and non-portable communications equipment is located within a vital area.	~~An inspection of the as-built location of the security power supply for alarm annunciator equipment and non-portable communications equipment will be performed.~~ An inspection will be performed to ensure that the location of the secondary security power supply equipment for alarm annunciator equipment and non-portable communications equipment is within a vital area.	~~Access to the security power supply for alarm annunciator equipment and non-portable communications equipment is through an activated intrusion alarm system and at least two security hardened barriers.~~ Secondary security power supply equipment for alarm annunciator equipment and non-portable communication equipment is located within a vital area.
17. Vital areas are locked and alarmed with active intrusion detection systems that annunciate in the central and secondary alarm stations upon intrusion into a vital area.	An inspection of the as-built vital areas, and central and secondary alarm stations are performed.	Vital areas are locked and alarmed with active and intrusion is detected and annunciated ~~detection systems that annunciate~~ in both the central and secondary alarm stations ~~upon intrusion into a vital area~~.
~~18. The locks used for the protection of the vital areas are manipulative resistant.~~	~~Type test, analysis, or a combination of type test and analysis will be performed for the locks used in the protection of the vital areas.~~	~~A report exists and concludes that the locks used for the protection of the vital areas are manipulative resistant.~~