No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
S01	**<u>As-Built Inspection and Analyses</u>** Seismic Category I Structures	The [YYY structure], including the critical sections listed in [Table x.x.x-x], is Seismic Category I, and is designed and constructed to maintain its structural integrity under the design basis loads specified in the Design Description.	Inspections and reconciliation analyses will be performed of the as-built [YYY structure]. Deviations from the design, due to as-built conditions during construction, will be analyzed for the design basis loads.	A design report for the as-built [YYY structure] exists and concludes that the construction deviations due to as-built conditions have been reconciled and that the as-built [YYY structure], including critical sections listed in [Table x.x.x-x], can maintain its structural integrity under the design basis loads.
	<u>Tier 2 Section 14.3 Discussion</u> Inspections and reconciliation analyses are performed of the as-built [YYY structure] to verify that the structure, including the critical sections, can maintain its structural integrity under the design basis loads. The [YYY structure] and its design basis loads are discussed in Tier 2 Section 3.8.x. Guidance for the content and structure of the as-built design report is provided in Standard Review Plan (SRP) Section 3.8.4, Appendix C.			

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
New ITAAC	**<u>As-Built Inspection</u>** Seismic Category I Structure - Key dimensions	Key dimensions and tolerances, used for seismic analyses of the Seismic Category I [YYY structure], are as provided in [Figure(s) x.x.x-x or Table(s) x.x.x-x].	Inspections will be performed to verify the key dimensions of the as-built [YYY structure].	The key dimensions of the as-built [YYY structure] conform to the dimensions, including associated tolerances, provided in [Figure(s) x.x.x-x or Table(s) x.x.x-x].
	<u>Tier 2 Section 14.3 Discussion</u> Inspections of the as-built [YYY structure] key dimensions, identified in Tier 2 Section 3.x, are performed to verify that the key dimensions and tolerances are met. Tier 2 Section 3.8.x provides descriptive information, including plans and sections of each Seismic Category I structure, to establish that there is sufficient information to define the primary structural aspects and elements relied upon for the structure to perform the intended safety functions.			

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
New ITAAC Replaces S02, S03 and S04	**<u>As-Built Inspection and Analysis</u>** Structures, Systems, and Components (SSCs) - Seismic Interaction	The non-Seismic Category I structures, systems, and components (SSCs) located within an impact zone of the Seismic Category I SSCs will not impair the ability of any Seismic Category I SSCs to perform their intended safety-related functions during or following a safe-shutdown earthquake (SSE).	Inspections and analyses will be performed to confirm that the as-built non-Seismic Category I SSCs will not impair the ability of the as-built Seismic Category I SSCs to perform their safety-related functions during or following an SSE.	A report exists and concludes that the non-Seismic Category I SSCs located within an impact zone of the Seismic Category I SSCs will not impair the ability of any Seismic Category I SSCs to perform their safety-related functions during or following an SSE as demonstrated by one or more of the following criteria: • The Seismic Category I SSCs are isolated from the non-Seismic Category I SSCs so that interaction does not occur. • The Seismic Category I SSCs are analyzed to confirm that the ability to perform their safety-related functions is not impaired as a result of impact from the non-Seismic Category I SSCs. • A non-Seismic Category I restraint system designed to Seismic Category I requirements is used to assure that no interaction occurs between the Seismic Category I SSCs and the non-Seismic Category I SSCs.

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
	Tier 2 Section 14.3 Discussion Tier 2 Section 3.7.x discusses that per Regulatory Guide 1.29, some SSCs that perform no safety-related function could, if they failed under seismic loading, prevent or reduce the functioning of a Seismic Category I SSC or cause incapacitating injury to main control room occupants during or following an SSE. These nonsafety-related SSCs are classified as non-Seismic Category I and are designed to withstand SSE seismic loads without incurring a structural failure that permits deleterious interaction with any Seismic Category I SSCs or that could result in injury to main control room occupants. Inspections are performed to verify that non-Seismic Category I SSCs do not impair the ability of the Seismic Category I SSCs to perform their safety-related functions as demonstrated by one of the following criteria: • The Seismic Category I SSCs are isolated from the non-Seismic Category I SSCs so that interaction does not occur. • The Seismic Category I SSCs are analyzed to confirm that the ability to perform their safety-related functions is not impaired as a result of impact from non-Seismic Category I SSCs. • A non-Seismic Category I restraint system designed to Seismic Category I requirements is used to assure that no interaction occurs between the non-Seismic Category I SSCs and the Seismic Category I SSCs.			

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
S05	**<u>As-Built Inspection and Analysis</u>** Radwaste Category [RW - XX] Structural Integrity	The [YYY structure], a non-Seismic Category I [RW-XX] structure, is designed and constructed to conform to or exceed the criteria of Regulatory Guide 1.143.	Inspections and analysis will be performed of the as-built [RW-XX] [YYY structure].	A report exists and concludes that the design and construction of the as-built [YYY structure] conform to or exceed the [RW - XX] criteria in Regulatory Guide 1.143.
	<u>Tier 2 Section 14.3 Discussion</u> Inspections and analyses of the as-built [YYY structure] for the management of radioactive waste are performed to verify that the design and construction conform to or exceed the applicable criteria of Regulatory Guide 1.143. The design criteria for structures for the management of radioactive waste are discussed in Tier 2 Section XX.			

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
New ITAAC **Prior C01 & C02**	**As-Built Inspection and Analysis** ASME Section III, Division 1, Class MC Primary Reactor Containment Vessel	The ASME Class MC primary reactor containment vessel is Seismic Category I and is designed and constructed in accordance with ASME Code Section III, Division 1.	Inspection and reconciliation analyses will be performed on the as-built ASME Class MC primary reactor containment vessel per ASME Section III, Division 1.	The ASME Code Section III Data Report(s) and NCA-3550 Design Report(s) for the as-built ASME Class MC primary reactor containment vessel exist and conclude that the requirements of ASME Code Section III, Division 1 are met.
	Tier 2 Section 14.3 Discussion Inspections during construction are performed of the as-built ASME Code Class MC reactor containment vessel, and deviations due to as-built conditions are reconciled with the approved as-designed ASME Design Report. An inspection is performed of the Code Class MC primary reactor containment vessel Design Report(s) to verify the report(s) meets the requirements of NCA-3551.1. As required by ASME Code Section III NCA-1210, each ASME Code Class MC containment vessel requires a Design Report in accordance with NCA-3550. NCA-3551.1 requires that the drawings used for construction be in agreement with the Design Report before it is certified and be identified and described in the Design Report. It is the responsibility of the N Certificate Holder to furnish a Design Report for each component and support, except as provided in NCA-3551.2 and NCA-3551.3. NCA-3551.1 also requires that the Design Report be certified by a Registered Professional Engineer when it is for Class 1 components and supports, Class CS core support structures, Class MC vessels and supports, Class 2 vessels designed to NC-3200 (NC-3131.1), or Class 2 or Class 3 components designed to Service Loadings greater than Design Loadings. An inspection is also performed of the Data Reports for the Code Class MC vessel and components to ensure (1) that the appropriate Data Reports have been provided as specified in Table NCA-8100-1, and (2) that the Certificate Holder or Owner and the Authorized Nuclear Inspector (ANI) have signed the Data Reports. The type of individual Data Report Forms necessary to record the required Code Data is identified in ASME Code Section III Table NCA-8100-1. Tier 2 Section 3.8.x provides the descriptive information, including the plans for and sections of the ASME Class MC primary reactor containment vessel, to establish that sufficient information is provided to define the primary structural aspects and elements relied upon to perform the containment function.			

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
New ITAAC	**As-Built Inspection and Analysis** ASME Section III, Division 2, Concrete Primary Reactor Containment	The concrete primary reactor containment structure is Seismic Category 1 and is designed and constructed per ASME Code, Section III Division 2.	Inspections and reconciliation analyses will be performed of the as-built concrete primary reactor containment structure.	The ASME Code Section III Data Report(s) and NCA-3350 Design Report(s) for the as-built concrete primary reactor containment exist and conclude that the requirements of ASME Code, Section III, Division 2 are met.
	Tier 2 Section 14.3 Discussion Inspections during construction are performed of the as-built ASME Code Class CC reactor containment structure and deviations due to as-built conditions are reconciled with the approved as-designed ASME Design Report. An inspection is performed of the Code Class CC primary reactor containment Design Report(s) to verify that the report(s) meets the requirements of NCA-3350. As required by ASME Code Section III NCA-1210, each ASME Code Class CC containment structure requires a Design Report in accordance with NCA-3350. NCA-3350 requires that the Designer prepare a Design Report in sufficient detail to show that the applicable stress limitations are satisfied when the component is subject to the loading conditions specified in the Design Specification and this Section, and that Design Report prepared by the Designer contain calculations and sketches substantiating that the design is in accordance with the Design Specification and this Section. Tier 2 Section 3.8.x provides the descriptive information, including the plans or and sections of the concrete primary reactor containment structure, to establish that sufficient information is provided to define the primary structural aspects and elements relied upon to perform the containment function.			

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
New ITAAC	**As-Built Inspection and Analysis** ASME Section III, Division 2, Concrete Primary Reactor Containment Class MC Liner and Penetration Assemblies.	The concrete primary reactor containment liner and penetration assemblies are designed and constructed in accordance with ASME Code, Section III, Division 2, Class MC requirements.	Inspections and reconciliation analyses will be performed of the as-built concrete primary reactor containment liner and penetration assemblies.	The ASME Code Section III Data Report(s) and NCA-3350 Design Report(s) for the as-built concrete primary reactor containment liner and penetration assemblies exist and conclude that the requirements of ASME Code, Section III, Division 2 are met.
	Tier 2 Section 14.3 Discussion Inspections during construction are performed of the as-built ASME Code Class CC primary reactor containment liner and penetration assemblies and deviations due to as-built conditions are reconciled with the approved as-designed ASME Design Report. An inspection is performed of the Code Class CC primary reactor containment liner and penetration assemblies Design Report(s) to verify the report(s) meets the requirements of NCA-3551.1. As required by ASME Code Section III NCA-1210, each ASME Code Class CC primary reactor containment liner and penetration assembly requires a Design Report in accordance with NCA-3350. NCA-3551.1 requires that the drawings used for construction be in agreement with the Design Report before it is certified and be identified and described in the Design Report. It is the responsibility of the N Certificate Holder to furnish a Design Report for each component and support, except as provided in NCA-3551.2 and NCA-3551.3. NCA-3551.1 also requires that the Design Report be certified by a Registered Professional Engineer when it is for Class 1 components and supports, Class CS core support structures, Class MC vessels and supports, Class 2 vessels designed to NC-3200 (NC-3131.1), or Class 2 or Class 3 components designed to Service Loadings greater than Design Loadings. An inspection is also performed of the Data Reports for Code Class MC vessel and components to ensure (1) that the appropriate Data Reports have been provided as specified in Table NCA-8100-1, and (2) that the Certificate Holder or Owner and the Authorized Nuclear Inspector (ANI) have signed the Data Reports. The type of individual Data Report Forms necessary to record the required Code Data is identified in ASME Code Section III Table NCA-8100-1.		

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
NEW ITAAC	**Preoperational Test** ASME Section III, Division 1 - Subsection NE Class MC pressure testing.	The ASME Code Class MC primary containment vessel maintains its pressure boundary integrity at the design pressure.	Pressure testing will be performed per ASME Code Section III, Division 1 Article NE-6000.	A report exists and concludes that the test results for the Class MC reactor containment vessel pressure test comply with ASME Code Section III, Division 1 Article NE-6000 requirements.
	Tier 2 Section 14.3 Discussion A preoperational test, described in Tier 2 Section 14.2.x, is performed to demonstrate that the test requirements of ASME Code Section III, Division 1 NE-6000 for a metal containment vessel are met. Following construction of a metal containment constructed to ASME Code, Section III, Division 1 NE-6000 requirements, a proof test of the metal containment is performed to demonstrate the quality of construction and to verify the acceptable performance of new design features. The metal containment vessel design, required analyses, and proof test are discussed in Tier 2, Section XX.			

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
New ITAAC **Prior C08**	**<u>Preoperational Test</u>** ASME Section III, Division 2, Concrete Containment Structural Integrity Test.	The concrete primary reactor containment structure, including the liner plate and penetration assemblies, maintains its pressure boundary at the design pressure.	A Structural Integrity Test will be performed per ASME Code Section III, Division 2 Article CC-6000.	A report exists and concludes that the Structural Integrity Test results for the concrete primary reactor containment structure, including the liner plate and penetration assemblies, comply with ASME Code Section III, Division 2 Article CC-6000 requirements.
	<u>Tier 2 Section 14.3 Discussion</u> A preoperational Structural Integrity Test, described in Tier 2 Section 14.2.x, is performed to demonstrate that the concrete primary reactor containment, including the liner plate and penetration assemblies, maintains its pressure boundary at the design pressure in compliance with ASME Code Section III, Division 2 CC-6000 requirements. Following construction of the concrete reactor containment constructed to ASME Code, Section III, Division 2 requirements, a proof test of the concrete containment is performed to demonstrate the quality of construction and to verify the acceptable performance of new design features. The concrete primary reactor containment structure design, required analyses, and proof test are discussed in Tier 2, Section XX.			

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
New ITAAC	**<u>Preoperational Test</u>** ASME Section III, Division 2, Concrete Containment Structural Integrity Test **(For BWRs Only).**	The concrete primary reactor containment pressure boundary, including the liner plate and penetration assemblies, maintains its structural integrity at the design pressure and the diaphragm floor and vent wall structures that separate the drywell and wetwell retain their integrity when subjected to their maximum design differential pressure.	i. A Structural Integrity Test will be performed per ASME Code Section III, Division 2 Article CC-6000. ii. A test of the diaphragm floor and vent wall structures will be performed with the drywell pressure greater than the wetwell pressure by at least [x.x] times the maximum design differential pressure.	i. A report exists and concludes that the Structural Integrity Test results for the concrete primary reactor containment structure, including the liner plate and penetration assemblies, comply with ASME Code Section III, Division 2 Article CC-6000 requirements. ii. The diaphragm floor and vent wall structures that separate the drywell and wetwell retain their structural integrity when subjected to a minimum differential pressure of [xxx psid].
	<u>Tier 2 Section 14.3 Discussion</u> A preoperational Structural Integrity Test (SIT), described in Tier 2 Section 14.2.x, is performed after completion of the containment construction to demonstrate that the concrete primary reactor containment, including the liner plate and penetration assemblies, can maintain its structural integrity at the design pressure. The SIT is performed in accordance with Article CC-6000 of ASME Code Section III, Division 2 and Regulatory Guide 1.136. [The first prototype containment structure will be instrumented to measure strains per ASME Code Section III, Division 2 Article CC-6370.] As a part of the SIT, the diaphragm floor and vent wall structures, which separate the drywell and wetwell, are subjected to at least [x.x] times the maximum design differential pressure to verify the internal structures retain structural integrity under the maximum design differential pressure. The concrete primary reactor containment structure design, required analyses, and structural integrity test are discussed in Tier 2, Section XX.			

This ITAAC will be placed in the Containment ITAAC group.

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
New ITAAC	**AS-Built Inspection and Analysis** Containment Free Volume	The primary reactor containment meets or exceeds the required minimum free volume.	An inspection and analysis will be performed to verify that the as-built primary reactor containment meets or exceeds the required minimum free volume.	The primary reactor containment free volume is greater than or equal to [XXX ft^3].
	Tier 2 Section 14.3 Discussion Inspection and analysis is performed to verify that the as-built primary reactor containment free volume meets or exceeds the volume assumed in the accident analysis. Tier 2 Section XX discusses the containment structure and volume.			