

**Structural ITAAC (S#)**

GRP	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
S01	<b>As-built Inspection</b> Seismic Category I Structure Integrity	The [YYY structure] is Seismic Category I and withstands design basis loads without loss of structural integrity. <del>and safety related functions.</del>	<del>An</del> inspection of construction activities (e.g.: structural components, reinforcements, key dimensions, etc.) and the associated documentation and analysis will be performed <del>of the floor, wall, and ceiling dimensions</del> to reconcile the as-built [YYY structure] with the approved design.	A report exists and concludes the as-built <del>The</del> [YYY structure] conforms to the design requirements including the key floor, wall, and ceiling dimensions <del>conform to the dimensions</del> and tolerances listed in [Table x.x.x-x or Figure x.x.x.-x] and can withstand the design basis loads without loss of structural integrity.
<p><b><u>Tier 2 Section 14.3 Discussion</u></b>                      Section 3.8.x discusses the load combinations applied to the Seismic Category I [YYY structure]. Key dimensions of critical sections are discussed in Section 3.8.x. An ITAAC inspection will be performed to verify that the as-built key dimensions, including tolerances, of the Seismic Category I [YYY structure], floor, wall, and ceiling satisfy the criteria of [Tier 1 Table x.x.x-x or Figure x.x.x.-x] as documented on associated as-built design drawings.</p>				
S02	<b>As-built Inspection</b> Physical Separation of Seismic Category I Structures <del>and Non-seismic Category I Structures</del>	Physical separation exists between the <del>non</del> -Seismic Category I [XXX structure] and the Seismic Category I [YYY structure] to preclude interaction during <del>or following</del> a safe shutdown earthquake.	An inspection will be performed of the physical separation distance between the as-built [XXX structure] and the as-built [YYY structure].	The [XXX structure] is located at least [### ft] from the [YYY structure] as shown on [Figure x.x.x-x, Table x.x.x-x, or as described in Tier 1 design Section x.x].
<p><b><u>Tier 2 Section 14.3 Discussion</u></b>                      Section 3.7.x discusses that the <del>collapse of the non</del>-Seismic Category I [XXX structure] shall not <del>interact with</del> <del>cause</del> the <del>non</del>-Seismic Category I [XXX structure] <del>to strike the Seismic Category I [YYY structure]</del> because the structures are separated by at least - [### ft]. An ITAAC inspection will be performed to verify that the as-built [XXX structure] is located at least [### ft] from the as-built [YYY structure] to satisfy the criteria of [Tier 1 Figure x.x.x-x, Tier 1 Table x.x.x-x, or as described in Tier 1 design Section x.x] as documented on associated as-built design drawings.</p>				

SMR ITAAC Set # 1 - Proposed Draft Standard SMR ITAAC (Structural, Piping, and HFE)  
 Updated 7/16/2014 – discussed at NRC Meeting May 7, 2014

GRP	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria	
S03	<b>As-built Inspection</b> Non-seismic Category I Structures Failure/ Impairment of Seismic Category I Structures	The non-Seismic Category I [XXX structure] does not impair the ability of the Seismic Category I [YYY structure] to perform its design basis safety function during or following a safe shutdown earthquake.	An inspection will be performed of the physical separation distance between the as-built [XXX structure] and the as-built [YYY structure].	The [XXX structure] is located at least of [### ft] from the [YYY structure] as shown on [Figure x.x.x-x, Table x.x.x-x or as described in Tier 1 design Section x.x].	
<p><b><u>Tier 2 Section 14.3 Discussion</u></b></p> <p>Section 3.7.x discusses that the distance between the non-Seismic Category I [XXX structure] and the Seismic Category I [YYY structure] is insufficient to prevent the non-Seismic Category I [XXX structure] from striking the Seismic Category I [YYY structure] if the non-Seismic Category I [XXX structure] collapsed. Therefore, the non-Seismic Category I [XXX structure] is analyzed to SSE load conditions and designed so that the non-Seismic Category I [XXX structure] will not collapse. However, the non-Seismic Category I [XXX structure] may slide or uplift creating a physical interaction between the non-Seismic Category I [XXX structure] and the Seismic Category I [YYY structure] unless the gap between the structures is adequate to prevent interaction. An ITAAC inspection will be performed to verify that the as-built [XXX structure] is located at least [### ft] from the as-built [YYY structure] to satisfy the criteria of [Tier 1 Figure x.x.x-x, Tier 1 Table x.x.x-x, or as described in Tier 1 design Section x.x] as documented on associated as-built design drawings.</p>					
<p><b>Seismic NS &amp; II over I type issues</b></p>					
	Buildings with significant quantities of radioactive materials	Non-seismic Category I structures, systems, and components (SSCs) will not impair the ability of the seismic Category I SSCs to perform their safety function(s) during or following a safe shutdown earthquake.	The {XXX structure} is a non-Seismic Category I RW-IIa structure, designed in accordance with Regulatory Guide 1.143 to maintain its structural integrity under design load conditions during and after a safe shutdown earthquake (SSE).	An inspection will be performed to verify separation and/or protection barriers between the as-built non-seismic Category I and seismic Category I SSCs.	A report exists and concludes the as-built non-Seismic Category I SSCs will not impair the ability of the seismic Category I SSCs to perform their safety function(s) during and following an SSE based on physical separation or installed protective barriers.
			Inspection and analysis will be performed of the construction activities and documentation (e.g. structural components, reinforcements, key dimensions, etc.) to reconcile the as-built non-Seismic Category I RW-IIa structure with the approved design and design load.	A report(s) exists and concludes the as-built non-Seismic Category I RW-IIa structure conforms to the design requirements and can withstand design loads without loss of structural integrity per Regulatory Guide 1.143 during and after the SSE.	