

No.	ITAAC Category/Type	Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
B01	<p><u>As-built Testing</u> Backfill material under Seismic Category 1 Structures</p>	Backfill material under and adjacent to [YYY Seismic Category 1 structure(s)] is installed to meet a minimum of 95 percent Modified Proctor compaction density.	Tests will be performed during placement of the backfill materials.	A report exists and concludes that the as-built backfill material placed under and adjacent to the [YYY Seismic Category 1 structure(s)] meets the minimum 95 percent Modified Proctor Compaction.
<p><u>Tier 2 Section 14.3 Discussion</u></p> <p>Tier 2 Section 2.5.4.5 discusses, in part, the excavations, backfill and earthwork analyses needed to meet the requirements of 10 CFR Part 50. The object of this ITAAC is to ensure reliable performance of the foundation bearing material over the life of the plant. Specifically, If backfill is to be placed under safety-related structures, proper ITAAC should be specified in the applicant's technical submittal to ensure that the static and dynamic properties of in-place backfill material will be the same as, or better than the design parameters. Similarly, if needed, ITAAC also includes backfill surrounding Seismic Category 1 structures depending on treatment in Soil Structure Calculations (SSI). The frequency of testing shall be site specific and is dependent of complexity of the task. This should be described in pertinent section/s of the FSAR. By specifying the expected compaction specifications of backfill material, this ITAAC provides one way to confirm that the aforementioned static and dynamic properties of said backfill are met prior to the construction of the Seismic Category 1 structure.</p>				

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B02	<p><u>As-built Testing</u></p> <p>Backfill material under Seismic Category 1 Structures</p>	<p>Backfill shear wave velocity underneath and adjacent to the [YYY Seismic Category 1 structure(s)] is greater than or equal to the design shear wave velocity.</p>	<p>Tests will be performed to determine field shear wave velocity, at a minimum, when backfill placement is at the following:</p> <ul style="list-style-type: none"> • The Bottom of the [YYY Seismic Category 1 structure's] foundation depth. A minimum of 5 spatially distributed measurements is to be conducted under the footprint of the foundation. • Finish grade adjacent to the embedded [Seismic Category 1 structure(s)]. A minimum of 5 spatially distributed measurements is to be conducted along the perimeter of the structure(s). 	<p>A report exists and concludes that the as built backfill shear wave velocity underneath and adjacent to the [YYY Seismic Category 1 structure(s)] is greater than or equal to the design shear wave velocity of [XXXX, fps or m/s].</p>
<p><u>Tier 2 Section 14.3 Discussion</u></p> <p>Section 2.5.4.5 discusses, in part, the excavations, backfill and earthwork analyses needed to meet the requirements of 10 CFR Part 50. The object of this ITAAC is to ensure reliable performance of the foundation bearing material over the life of the plant. Specifically, If backfill greater than 5 feet thick, as specified in SRP 2.5.4, is to be placed under safety-related structures, proper ITAAC should be specified in the applicant's technical submittal to ensure that the static and dynamic properties of in-place backfill material will be the same as, or better than the design parameters. Shear wave velocity measurements shall take into consideration the spatial variability of the backfill material under the footprint of the foundation. By specifying the expected dynamic properties of backfill material by way of in situ shear modulus testing, this ITAAC provides one way to confirm that the aforementioned dynamic properties of said backfill are met prior to the construction of the Seismic Category 1 structure.</p>				

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B03	<p><u>As-built Testing</u> Cementitious construction material under Seismic Category 1 Structures</p>	<p>Fill concrete placed under [YYY Seismic Category I Structure(s),] is designed and tested to ensure that the static and dynamic properties of the material will be the same as or better than the specified design parameters.</p>	<p>Tests will be performed to determine the static and/or dynamic properties of the fill concrete.</p>	<p>A report exists and concludes that the fill concrete is equal to, or greater than, [design value(s)] as specified in application]</p>
<p><u>Tier 2 Section 14.3 Discussion</u> Section 2.5.4.5 discusses, in part, the excavations, backfill (including cementitious construction material) and earthwork analyses needed to meet the requirements of 10 CFR Part 50. The object of this ITAAC is to ensure reliable performance of the foundation bearing material over the life of the plant. Specifically, If cementitious construction material, greater than 5 feet thick as specified in SRP 2.5.4, is to be placed under safety-related structures, proper ITAAC should be specified in the applicant's technical submittal to ensure that the static and dynamic properties of the material will be the same as, or better than the design parameters. In general, by testing the expected 28-day mean compressive strength of cementitious construction material, this ITAAC provides one way to confirm that the properties (static, and dynamic) of said material are met prior to the construction of the Seismic Category 1 structure.</p>				