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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3
ITAAC Closure Notification on Completion of ITAAC 3.3.00.02a.ii.f [Index Number 769]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 3.3.00.02a.ii.f [Index Number 769] for verification that the as-built concrete thicknesses of the turbine building sections conform to the building sections defined in Table 3.3-1, except for designed openings or penetrations, or the report documents an evaluation of thickness deviations identified during construction and demonstrates that the as-built structures will withstand the design basis loads without loss of structural integrity. The closure process for this ITAAC is based on the guidance described in NEI 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Tom Petrak at 706-848-1575.

Respectfully submitted,

Michael J. Yox
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 3.3.00.2a.ii.f [Index Number 769]

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Southern Nuclear Operating Company
ND-20-0046
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 3.3.00.02a.ii.f [Index Number 769]

ITAAC Statement

Design Commitment

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.

Inspections, Tests, Analyses

ii) An inspection of the as-built concrete thickness will be performed.

Acceptance Criteria

ii.f) A report exists that concludes that the as-built concrete thicknesses of the turbine building sections conform to the building sections defined in Table 3.3-1, except for designed openings or penetrations, or the report documents an evaluation of thickness deviations identified during construction and demonstrates that the as-built structures will withstand the design basis loads without loss of structural integrity.

ITAAC Determination Basis

Multiple ITAAC are performed to verify the nuclear island structures, including the critical sections listed in Combined License (COL) Appendix C, 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 subject ITAAC requires inspections to be performed and documented in a report that concludes the as-built concrete thicknesses of the turbine building conform to the building sections defined in COL Appendix C, Table 3.3-1 (Attachment A), except for designed openings or penetrations, or the report documents an evaluation of thickness deviations identified during construction and demonstrates that the as-built structures will withstand the design basis loads without loss of structural integrity.

The inspections were performed of the as-built sections (following concrete placement) in accordance with the requirements of measurement guideline APP-GW-IT-001 (Reference 1), which identifies the location and frequency of inspection points for determining wall thickness to ensure the resulting measurements are representative of the entire section being inspected. The measurements are based on the size and construction type of each section. Measurements were taken using survey equipment in accordance with site survey procedures (Reference 2).

The Vogtle Unit 3 turbine building walls were measured and documented in Reference 3. Discrepancies in the turbine building wall thicknesses that impacted the ITAAC Acceptance Criteria were further addressed in the results and conclusions delineated in Nonconformance and Disposition Reports (N&Ds) as noted in Reference 3.

The inspection results contained in the Unit 3 "Turbine Building Concrete Thickness Verification" (Reference 3) and summarized in Attachment A conclude that the as-built concrete thicknesses

of the turbine building sections conform to the building sections defined in Table 3.3-1, except for designed openings or penetrations, and an evaluation of the thickness deviations identified during construction demonstrates that the as-built structures will withstand the design basis loads without loss of structural integrity.

References 1 through 3 are available for NRC inspection as part of the Unit 3 ITAAC 3.3.00.02a.ii.f Completion Package (Reference 4).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review found that there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 3.3.00.02a.ii.f (Reference 4) and available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 3.3.00.02a.ii.f was performed for VEGP Unit 3 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. APP-GW-IT-001, Rev. 0, "Guidelines for Concrete Wall and Slab Thickness Measurements"
2. 26139-000-4MP-T81C-N3201, Rev. 5, "Construction Survey"
3. SV3-2100-ITR-800769, Rev. 0, "Turbine Building Concrete Wall Thickness Verification"
4. 3.3.00.02a.ii.f-U3-CP-Rev0, ITAAC Completion Package

Attachment A

Definition of Wall Thicknesses for Turbine Building from Unit 3 COL Appendix C, Table 3.3-1[(1)]

Wall or Section Description*	Column Lines* [(7)]	Floor Elevation or Elevation Range* [(7)(8)]	Concrete Thickness* [(2)(3)(4)(5)(9)(18)]	Inspection results	
				Minimum recorded thickness	Maximum recorded thickness
Turbine Building*[(9)]					
Wall adjacent to Column Line I.2	From Col. Line 11.05 to 11.2	From 100'-0" to 169'-0"	3'-0"	2'-11.4"	3'-0.4"
Wall along Column Line 11.2	From near I.2 to near Col. Line R	From 100'-0" to 169'-0"	2'-0"	1'-11.3"	2'-0.8"
Wall adjacent to Column Line R	From Col. Line 11.2 to Col. Line 11.02	From 100'-0" to 169'-0"	3'-0"	2'-11.5"	3'-0.8"
Wall along Column Line 11.02	From near Col. Line R to near Col. Line Q	From 100'-0" to 169'-0"	2'-0"	1'-10.8" [(17)(18)]	2'-0.2"
Wall along Column Line 11.05	From Col. Line K.4 to near Col. Line I.2	From 100'-0" to 169'-0"	2'-0"	1'-11.6"	2'-0.5"

Notes:
* Excerpt from Unit 3 COL Appendix C, Table 3.3-1

1. The column lines and floor elevations are identified and included on Figures 3.3-1 through 3.3-13.
2. These wall (and floor) thicknesses have a construction tolerance of ± 1 inch, except as noted and for exterior walls below grade where the tolerance is +12 inches, -1 inch. These tolerances are not applicable to the nuclear island basemat.

3. For walls that are part of structural modules, the concreate thickness also includes the steel face plates. Where faceplates with a nominal thickness of 0.5 inches are used in the construction of wall modules, the wall thicknesses in the column apply. Where faceplates thicker than the nominal 0.5 inches are used in the construction of the structural wall modules, the wall thicknesses in the area of the thicker faceplates are greater than indicated in this column by the amount of faceplate thickness increase over the nominal 0.5 inches. Overlay plates are not considered part of the faceplates, and thus are not considered in the wall thicknesses identified in this column.
4. For floors with steel surface plates, the concrete thickness also includes the plate thickness.
5. Where a wall (or a floor) has openings, the concrete thickness does not apply at the opening.
6. Not Applicable in Turbine Building
7. The Wall or Section Description, Column Line information, and Floor Elevation or Elevation Ranges are provided as reference points to define the general location. The concrete thickness of an item intersecting other walls, roofs or floors at a designated location (e.g., column line) is not intended to be measured to the stated column line, but only to the point where the intersection occurs.
8. Where applicable, the upper wall portions extend to their associated roofs, which may vary in elevation, e.g., sloped roofs.
9. From one wall/floor section to another, the concrete thickness transitions from one thickness to another, consistent with the configurations in Figures 3.3-1 through 3.3-14.
10. Not Applicable in Turbine Building
11. Not Applicable in Turbine Building
12. Not Applicable in Turbine Building
13. Not Applicable in Turbine Building
14. Not Applicable in Turbine Building
15. Not Applicable in Turbine Building
16. Not Applicable in Turbine Building

17. Construction deviations in the turbine building from the thickness and tolerances specified in this table are evaluated in the thickness report to demonstrate that the as-built structures will withstand design basis loads without loss of structural integrity of safety functions in accordance with ITAAC 3.3.00.02a.ii.f.
18. Nonconformances from the thicknesses and tolerances specified in Table 3.3-1 (i.e. out of tolerance conditions) are addressed under the 10 CFR Part 50, Appendix B process and subsequently are screened in accordance with the 10 CFR Part 52, Appendix D, Section VIII process, to ensure that the licensing basis is adequately maintained. Construction deviations will continue to be assessed against the licensing basis requirements and will be addressed in accordance with licensee procedures and regulatory requirements and, if applicable, a license amendment will be obtained prior to implementation of the change.