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10 CFR 52.99(c)(3)U.S. Nuclear Regulatory Commission
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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3 and Unit 4
Notice of Uncompleted ITAAC 225-days Prior to Initial Fuel Load
Item 2.2.03.08c.x [Index Number 195]

Ladies and Gentlemen:

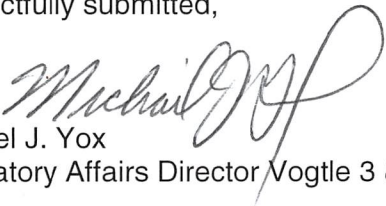
Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of September 25, 2019, Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Uncompleted Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.2.03.08c.x [Index Number 195] has not been completed greater than 225-days prior to initial fuel load. The Enclosure describes the plan for completing this ITAAC. Southern Nuclear Operating Company will, at a later date, provide additional notifications for ITAAC that have not been completed 225-days prior to initial fuel load.

This notification is informed by 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. In accordance with NEI 08-01, this notification includes ITAAC for which required inspections, tests, or analyses have not been performed or have been only partially completed. All ITAAC will be fully completed and all Section 52.99(c)(1) ITAAC Closure Notifications will be submitted to NRC to support the Commission finding that all acceptance criteria are met prior to plant operation, as required by 10 CFR 52.103(g).

This letter contains no new NRC regulatory commitments.

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

Respectfully submitted,


Michael J. Yox
Regulatory Affairs Director Vogtle 3 & 4Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion Plan for Uncompleted ITAAC 2.2.03.08c.x [Index Number 195]

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**Southern Nuclear Operating Company
ND-19-0245
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion Plan for Uncompleted ITAAC 2.2.03.08c.x [Index Number 195]**

ITAAC Statement

Design Commitment:

8.c) The PXS provides RCS makeup, boration, and safety injection during design basis events.

Inspections, Tests, Analyses:

x) Inspections will be conducted of the as-built nonsafety-related coatings or of plant records of the nonsafety-related coatings used inside containment on walls, floors, ceilings, and structural steel except in the CVS room. Inspections will be conducted of the as-built nonsafety-related coatings or of plant records of the nonsafety-related coatings used on components below the maximum flood level of a design basis LOCA or located above the maximum flood level and not inside cabinets or enclosures.

Inspections will be conducted on caulking, tags, and signs used inside containment below the maximum flood level of a design basis LOCA or located above the maximum flood level and not inside cabinets or enclosures.

Inspections will be conducted of ventilation filters and fiber-producing fire barriers used inside containment within the ZOI or below the maximum flood level of a design basis LOCA.

Acceptance Criteria:

x) A report exists and concludes that the coatings used on these surfaces have a dry film density of $\geq 100 \text{ lb/ft}^3$. If a coating is used that has a lower dry film density, a report must exist and conclude that the coating will not transport. A report exists and concludes that inorganic zinc coatings used on these surfaces are Safety – Service Level I or have been quantified and justified in a program for management of unqualified coatings to demonstrate the unqualified coatings are acceptable for use.

A report exists and concludes that tags and signs used in these locations are made of steel or another metal with a density $\geq 100 \text{ lb/ft}^3$. In addition, a report exists and concludes that caulking used in these locations or coatings used on these signs or tags have a dry film density of $\geq 100 \text{ lb/ft}^3$. If a material is used that has a lower density, a report must exist and conclude that there is insufficient water flow to transport lightweight caulking, signs, or tags.

A report exists and concludes that the ventilation filters and fire barriers in these locations have a density of $\geq 100 \text{ lb/ft}^3$.

ITAAC Completion Description

Multiple ITAAC are performed to demonstrate that the Passive Core Cooling System (PXS) provides Reactor Coolant System (RCS) makeup, boration, and safety injection during design basis events. The subject ITAAC requires inspections to verify that:

1. Coatings - Nonsafety-related coatings used inside containment on walls, floors, ceilings and structural steel (except in the Chemical and Volume Control System (CVS) room), and components below the maximum flood level (MFL) of a design basis Loss of Coolant Accident (LOCA), or located above the MFL and not inside cabinets or

enclosures, have a dry film density of $\geq 100 \text{ lb/ft}^3$, and inorganic zinc (IOZ) coatings used on these surfaces are Safety – Service Level I or have been quantified and justified in a program for management of unqualified coatings to demonstrate the unqualified coatings are acceptable for use.

2. Caulking, Tags, and Signs - Tags and signs used below the MFL of a design basis LOCA or located above the MFL and not inside cabinets or enclosures are made of steel or another metal with a density of $\geq 100 \text{ lb/ft}^3$, including coatings used on these signs and tags, and that caulking in these areas has a density of $\geq 100 \text{ lb/ft}^3$.
3. Ventilation Filters and Fiber-producing Fire Barriers - Ventilation filters and fiber-producing fire barriers used inside containment within the Zone of Influence (ZOI) of a LOCA pipe break or below the MFL of a design basis LOCA have a density of $\geq 100 \text{ lb/ft}^3$.

1. – Coatings

Containment equipment design specifications require that the selected coating system meets the minimum dry film density requirement of $\geq 100 \text{ lb/ft}^3$, and that inorganic zinc coatings used on containment equipment surfaces are Safety – Service Level I (SLI). The minimum dry film unit weight is specified by the coating manufacturer's conformance documentation. The applied coatings are limited to those approved in the design specification (Reference 1), where the dry film density is an intrinsic property of each coating that is determined by testing prior to approval of that coating.

The acceptance criteria of this ITAAC was modified (Reference 2) to allow for a quantity of unqualified SLI coating areas to be administratively controlled under SNC's quality assurance program. An unqualified coating is one that has not passed the required laboratory testing or lacks adequate quality documentation to support its use as qualified. Each instance of unqualified coatings is documented and dispositioned and is consolidated into a unit-specific tracking log (Unit 3 and Unit 4 Unqualified Coatings Logs (UCL), (References 3 and 4)). Use of the unit-specific tracking log for unqualified SLI coatings facilitates compliance with the design specification requirements and provides a means for tracking and retaining a record of these unqualified coatings as a quality record throughout the operational life of the plant in compliance with ASTM D 7491-08 (Reference 5).

For coatings applied off-site at a vendor facility prior to shipment of items to the site, Quality Assurance Data Packages (QADPs) are generated in accordance with the vendor's approved Quality Plan and include documentation of the dry film density of the selected coating system, as well as application / inspection certifications for SLI coating applications. Independent personnel review application and inspection records of ITAAC-related coatings by performing an inspection of the QADPs using the guidance of EPRI TR-017218-R1 (Reference 6). This review is expanded to include all ITAAC-related commodity codes present in containment. Records of all QADPs for ITAAC-related off-site coated components are identified and contained in Unit 3 and Unit 4 Coating Receipt Inspection Reports (References 7 and 8).

This inspection confirms that vendor QADPs for the applied coatings include documentation of the dry film density for the selected coating system, as well as application / inspection certifications for SLI coating applications. Any unqualified coatings are tracked within the UCL for each unit.

The basis for inspecting coatings of as-built SSCs at other than their final installed locations is provided in NEI 08-01, Section 9.5, "As-built Inspections." Installation of coated walls, floors, ceilings, structural steel and piping is performed in accordance with applicable procedures to assure that coatings are not adversely impacted during installation.

For coatings applied on-site, the Construction Work Packages (CWPs) include documentation of the dry film density of the selected coating system, as well as application / inspection certifications for SLI coating applications.

The coating contractor QC personnel review application and inspection records of ITAAC-related coatings by performing an inspection of the CWPs; these are identified and contained in Unit 3 and Unit 4 On-Site Coating Inspection Reports (References 9 and 10). This inspection confirms that CWPs for the applied coatings include documentation of the dry film density for the selected coating system, as well as application / inspection certifications for SLI coating applications. Any unqualified coatings are tracked within the UCL for each unit.

Inspection of on-site application of coatings includes repairs or "touch-ups" applied following the initial application, as well as following installation of SSCs coated at the vendor facility. No coatings of lower density are used in these applications.

Inspections of the QADPs for SSCs coated at the vendor facility and CWPs associated with on-site application of coatings conclude that the coatings used on these surfaces have a dry film density $\geq 100 \text{ lb/ft}^3$, and that IOZ applications are Safety – Service Level I or are quantified and justified in a program for management of unqualified coatings to demonstrate the unqualified coatings are acceptable for use.

2. – Caulking, Tags, and Signs

Prior to application of tags, signs or caulking inside containment, design specifications require that the selected material is either steel or another material with a density of $\geq 100 \text{ lb/ft}^3$. Signs or tags that are coated are also required to have approved coatings with a dry film density of $\geq 100 \text{ lb/ft}^3$.

For tags, signs, and caulking used, the CWPs include documentation of the material and the density, and the dry film density of the selected coating system used on any tags or signs.

Caulking contractor personnel review application and inspection records of signs, tags and caulking by performing an inspection of the CWPs; these are identified and contained in Unit 3 and Unit 4 Caulking Inspection Reports (References 11 and 12), and in Unit 3 and Unit 4 Tag and Sign Inspection Reports (References 13 and 14).

This inspection confirms that CWPs include documentation of the material and the density of the tags, signs, and caulking, and the dry film density of the selected coating system used on any tags or signs. No materials of lower density are utilized for caulking, tags, and signs in these locations.

Inspection of the CWPs concludes that the tags and signs are made of steel or other metal with a density of $\geq 100 \text{ lb/ft}^3$ and that caulking used in these locations, or coatings used on these tags or signs, have a dry film density $\geq 100 \text{ lb/ft}^3$.

3. – Ventilation Filters and Fiber-producing Fire Barriers

By design, there are no ventilation filters installed within the AP1000 containment; filters for the containment air filtration system (VFS) are located in the auxiliary building.

Prior to installation of fire barriers inside containment that are within the ZOI or below the MFL, design specifications require that the fire barriers are either non-fiber-producing type barriers, or fiber-producing barriers that have a density of $\geq 100 \text{ lb/ft}^3$.

For fire barriers installed, the CWP's include documentation of the material and the density.

Site fire protection personnel review application and inspection records of fire barriers by performing an inspection of the CWP's; these are identified and contained in Unit 3 and Unit 4 Ventilation Filter and Fire Barrier Inspection Reports (References 15 and 16). This inspection confirms that CWP's include documentation of the material and the density of the fire barrier.

Inspection of the CWP's concludes that fire barriers have a density $\geq 100 \text{ lb/ft}^3$.

Together, these inspections, tests, and reports (References 3 through 16) provide evidence that the ITAAC Acceptance Criteria requirements are met:

- x) A report exists and concludes that the coatings used on these surfaces have a dry film density of $\geq 100 \text{ lb/ft}^3$. If a coating is used that has a lower dry film density, a report must exist and conclude that the coating will not transport. A report exists and concludes that inorganic zinc coatings used on these surfaces are Safety – Service Level I or have been quantified and justified in a program for management of unqualified coatings to demonstrate the unqualified coatings are acceptable for use;
- A report exists and concludes that tags and signs used in these locations are made of steel or another metal with a density $\geq 100 \text{ lb/ft}^3$. In addition, a report exists and concludes that caulking used in these locations or coatings used on these signs or tags have a dry film density of $\geq 100 \text{ lb/ft}^3$. If a material is used that has a lower density, a report must exist and conclude that there is insufficient water flow to transport lightweight caulking, signs, or tags; and
- A report exists and concludes that the ventilation filters and fire barriers in these locations have a density of $\geq 100 \text{ lb/ft}^3$.

References 3 through 16 are available for NRC inspection as part of the ITAAC 2.2.03.08c.x Completion Package (References 17 and 18).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found one (1) open Licensee Identified Violation associated with this ITAAC.

1. 05200025/2016007-01, 05200026/2016007-01 (Licensee Identified Violation (LIV), Open Failure to Provide Adequate Procurement Specifications for Coatings (ML16245A895)

References (available for NRC inspection)

1. SV3/4-GW-Z0-604 Rev 9, "Application of Protective Coatings to Systems, Structures and Components for the AP1000 Reactor Plant"
2. "Unqualified Service Level I Coatings Program (LAR 17-039)" submitted by Southern Nuclear Operating Company (SNC) for the Vogtle Electric Generating Plant (VEGP), Units 3 and 4, on November 3, 2017, and supplemented March 28, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML17307A201 and ML18087A147, respectively).
3. SV3-AX01-GEC-000001 Rev. 0, "Vogtle Unit 3 Unqualified Coatings Log"
4. SV4-AX01-GEC-000001 Rev. 0, "Vogtle Unit 4 Unqualified Coatings Log"
5. ASTM D 7491-08, "Standard Guide for Management of Non-Conforming Coatings in Coating Service Level I Areas of Nuclear Power Plants,"
6. TR-017218-R1, "Guideline for Sampling in the Commercial-Grade Item Acceptance Process", January 1999
7. Unit 3 Coating Receipt Inspection Reports
8. Unit 4 Coating Receipt Inspection Reports
9. Unit 3 On-Site Coating Inspection Reports
10. Unit 4 On-Site Coating Inspection Reports
11. Unit 3 Caulking Inspection Reports
12. Unit 4 Caulking Inspection Reports
13. Unit 3 Tag and Sign Inspection Reports
14. Unit 4 Tag and Sign Inspection Reports
15. Unit 3 Ventilation Filter and Fire Barrier Inspection Reports
16. Unit 4 Ventilation Filter and Fire Barrier Inspection Reports
17. 2.2.03.08c.x-U3-CP-Rev0, "ITAAC Completion Package"
18. 2.2.03.08c.x-U4-CP-Rev0, "ITAAC Completion Package"
19. NEI 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52"