Southern Nuclear

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ND-19-0354
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 2.3.09.03.ii [Index Number 424]

Ladies and Gentlemen:

Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of April 05, 2019, Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Uncompleted Inspections Tests Analyses and Acceptance Criteria (ITAAC) Item 2.3.09.03.ii [Index Number 424] has not been completed greater than 225-days prior to initial fuel load. The Enclosure describes the plan for completing ITAAC 2.3.09.03.ii [Index Number 424]. 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)(3) 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,

Kelli A. Roberts for

Michael J. Yox
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion Plan for Uncompleted ITAAC 2.3.09.03.ii [Index Number 424]

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Southern Nuclear Operating Company
ND-19-0354
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Completion Plan for Uncompleted ITAAC 2.3.09.03.ii [Index Number 424]

ITAAC Statement

Design Commitment

3. The VLS provides the nonsafety-related function to control the containment hydrogen concentration for beyond design basis accidents.

4.a) Controls exist in the MCR to cause the components identified in Table 2.3.9-2 to perform the listed function.

5. Displays of the parameters identified in Table 2.3.9-1 can be retrieved in the MCR.

Inspections/Tests/Analyses

i) Inspection for the number of igniters will be performed.

ii) Operability testing will be performed on the igniters.

Testing will be performed on the igniters using the controls in the MCR.

Inspection will be performed for retrievability of the displays identified in Table 2.3.9-1 in the MCR.

Acceptance Criteria

i) At least 66 hydrogen igniters are provided inside containment at the locations specified in Table 2.3.9-2.

ii) The surface temperature of the igniter meets or exceeds 1700°F.

Controls in the MCR operate to energize the igniters

Displays identified in Table 2.3.9-1 can be retrieved in the MCR.

ITAAC Completion Description

This ITAAC requires testing and inspections be performed to verify that the Containment Hydrogen Control System (VLS) provides the nonsafety-related function to control the containment hydrogen concentration for beyond design basis accidents by ensuring that the required number of hydrogen igniters are installed in the appropriate locations as specified by VEGP Combined License (COL) Appendix C Table 2.3.9-2 (Attachment A) and that the surface temperature of the igniters meets or exceeds 1700°F. This ITAAC also verifies that controls exist in the Main Control Room (MCR) to cause the components identified in COL Appendix C Table 2.3.9-2 (Attachment A) to perform the listed function and that displays of the parameters identified in COL Appendix C Table 2.3.9-1 (Attachment B) can be retrieved in the MCR.

i) At least 66 hydrogen igniters are provided inside containment at the locations specified in Table 2.3.9-2.

An inspection is performed in accordance with Unit 3 and Unit 4 inspection procedure SV3-VLS-ITR-XXXX and SV4-VLS-ITR-XXXX (References 1 and 2) to verify that at least 66 hydrogen igniters are provided inside containment at the locations specified in Attachment A.

The inspection is conducted by performing a walk down of the installed hydrogen igniters to verify the correct number of hydrogen igniters are installed and that they are all in the proper location. The results of the inspection verify that for Unit 3 and Unit 4 there are at least 66 hydrogen igniters provided inside containment at the locations specified in Table 2.3.9-2.

ii) The surface temperature of the igniter meets or exceeds 1700°F.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-VLS-ITPP-501 and 4-VLS-ITPP-501 (References 3 and 4) to verify that the surface temperature of the igniter meets or exceeds 1700°F.

Testing begins by installing appropriate personnel protection barriers and closing the power supply breakers for the hydrogen igniters and control cabinets. Each hydrogen igniter group control is placed to ON and the temperature of each igniter is taken and verified to meet acceptance criteria.

The results of the testing on Unit 3 and Unit 4 verifies the surface temperature of each igniter meets or exceeds 1700°F.

Controls in the MCR operate to energize the igniters

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-VLS-ITPP-501 and 4-VLS-ITPP-501 (References 3 and 4) to verify that controls in the MCR operate to energize the igniters.

Testing is performed at an operator work station in Unit 3 and Unit 4 MCR and places the hydrogen igniters controls to ON. All of the igniters listed in Attachment A are verified to energize by measuring the temperature which is performed by item ii) above.

Displays identified in Table 2.3.9-1 can be retrieved in the MCR.

An inspection is performed in accordance with the Unit 3 and Unit 4 component test package work orders SNC922139 and SNCXXXXXX (References 5 and 6) for VLS indication verifications, and visually confirms that when each of the displays of parameters identified in Attachment B is summoned at an MCR workstation, the summoned plant parameter appears on a display monitor at that MCR workstation.

The completed test and inspection results (References 1 through 6), confirm that at least 66 hydrogen igniters are provided inside containment at the locations specified in Table 2.3.9-2, that the surface temperature of the igniter meets or exceeds 1700°F, that controls in the MCR operate to energize the igniters, and that the displays identified in Table 2.3.9-1 can be retrieved in the MCR.

References 1 through 6 are available for NRC inspection as part of Unit 3 and Unit 4 ITAAC Completion Packages (Reference 7 and 8).

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 there are no relevant ITAAC findings associated with this ITAAC.

References (available for NRC inspection)

1. SV3-VLS-ITR-XXXX, "Hydrogen Igniter Location Verification"
2. SV4-VLS-ITR-XXXX, "Hydrogen Igniter Location Verification"
3. 3-VLS-ITPP-501, "Containment Hydrogen Control System Preoperational Test Procedure"
4. 4-VLS-ITPP-501, "Containment Hydrogen Control System Preoperational Test Procedure"
5. SNC922139, "Containment Hydrogen Control System Indication Verifications – ITAAC: SV3-2.3.09.03.ii Item 5"
6. SNCXXXXXX, "Containment Hydrogen Control System Indication Verifications – ITAAC: SV4-2.3.09.03.ii Item 5"
7. 2.3.09.03.ii-U3-CP-Rev 0, ITAAC Completion Package
8. 2.3.09.03.ii-U4-CP-Rev 0, ITAAC Completion Package
9. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A

COL Appendix C Table 2.3.9-2

Equipment Name	Tag Number	Function	Power Group Number	Location	Room No.
Hydrogen Igniter 01	VLS-EH-01	Energize	1	Tunnel connection loop compartments	11204
Hydrogen Igniter 02	VLS-EH-02	Energize	2	Tunnel connection loop compartments	11204
Hydrogen Igniter 03	VLS-EH-03	Energize	1	Tunnel connection loop compartments	11204
Hydrogen Igniter 04	VLS-EH-04	Energize	2	Tunnel connection loop compartments	11204
Hydrogen Igniter 05	VLS-EH-05	Energize	1	Loop compartment 02	11402
Hydrogen Igniter 06	VLS-EH-06	Energize	2	Loop compartment 02	11502
Hydrogen Igniter 07	VLS-EH-07	Energize	2	Loop compartment 02	11402
Hydrogen Igniter 08	VLS-EH-08	Energize	1	Loop compartment 02	11502
Hydrogen Igniter 09	VLS-EH-09	Energize	1	In-containment refueling water storage tank (IRWST) sparger side	11305
Hydrogen Igniter 10	VLS-EH-10	Energize	2	IRWST sparger side	11305
Hydrogen Igniter 11	VLS-EH-11	Energize	2	Loop compartment 01	11401

Attachment A (con't)

Equipment Name	Tag Number	Function	Power Group Number	Location	Room No.
Hydrogen Igniter 12	VLS-EH-12	Energize	1	Loop compartment 01	11501
Hydrogen Igniter 13	VLS-EH-13	Energize	1	Loop compartment 01	11401
Hydrogen Igniter 14	VLS-EH-14	Energize	2	Loop compartment 01	11501
Hydrogen Igniter 15	VLS-EH-15	Energize	2	IRWST vacuum breaker vents	11305
Hydrogen Igniter 16	VLS-EH-16	Energize	1	IRWST vacuum breaker vents	11305
Hydrogen Igniter 17	VLS-EH-17	Energize	2	Northeast valve room	11207
Hydrogen Igniter 18	VLS-EH-18	Energize	1	Northeast accumulator room	11207
Hydrogen Igniter 19	VLS-EH-19	Energize	2	East valve room	11208
Hydrogen Igniter 20	VLS-EH-20	Energize	2	Southeast accumulator room	11206
Hydrogen Igniter 21	VLS-EH-21	Energize	1	Southeast valve room	11206
Hydrogen Igniter 22	VLS-EH-22	Energize	1	Lower compartment area (core makeup tank [CMT] and valve area)	11400
Hydrogen Igniter 23	VLS-EH-23	Energize	2	Lower compartment area (CMT and valve area)	11400

Attachment A (con't)

Equipment Name	Tag Number	Function	Power Group Number	Location	Room No.
Hydrogen Igniter 24	VLS-EH-24	Energize	2	Lower compartment area (CMT and valve area)	11400
Hydrogen Igniter 25	VLS-EH-25	Energize	2	Lower compartment area (CMT and valve area)	11400
Hydrogen Igniter 26	VLS-EH-26	Energize	2	Lower compartment area (CMT and valve area)	11400
Hydrogen Igniter 27	VLS-EH-27	Energize	1	Lower compartment area (CMT and valve area)	11300
Hydrogen Igniter 28	VLS-EH-28	Energize	1	Lower compartment area (CMT and valve area)	11400
Hydrogen Igniter 29	VLS-EH-29	Energize	1	Lower compartment area (CMT and valve area)	11400
Hydrogen Igniter 30	VLS-EH-30	Energize	2	Lower compartment area (CMT and valve area)	11403
Hydrogen Igniter 31	VLS-EH-31	Energize	1	Lower compartment area (CMT and valve area)	11400
Hydrogen Igniter 32	VLS-EH-32	Energize	1	Lower compartment area (CMT and valve area)	11400

Attachment A (con't)

Equipment Name	Tag Number	Function	Power Group Number	Location	Room No.
Hydrogen Igniter 33	VLS-EH-33	Energize	2	North CVS equipment room	11209
Hydrogen Igniter 34	VLS-EH-34	Energize	1	North CVS equipment room	11209
Hydrogen Igniter 35	VLS-EH-35	Energize	1	IRWST hooded vents	11500
Hydrogen Igniter 36	VLS-EH-36	Energize	2	IRWST hooded vents	11500
Hydrogen Igniter 37	VLS-EH-37	Energize	1	IRWST hooded vents	11500
Hydrogen Igniter 38	VLS-EH-38	Energize	2	IRWST hooded vents	11500
Hydrogen Igniter 39	VLS-EH-39	Energize	1	Upper compartment lower region	11500
Hydrogen Igniter 40	VLS-EH-40	Energize	2	Upper compartment lower region	11500
Hydrogen Igniter 41	VLS-EH-41	Energize	2	Upper compartment lower region	11500
Hydrogen Igniter 42	VLS-EH-42	Energize	1	Upper compartment lower region	11500
Hydrogen Igniter 43	VLS-EH-43	Energize	1	Upper compartment lower region	11500
Hydrogen Igniter 44	VLS-EH-44	Energize	1	Upper compartment lower region	11500
Hydrogen Igniter 45	VLS-EH-45	Energize	2	Upper compartment lower region	11500
Hydrogen Igniter 46	VLS-EH-46	Energize	2	Upper compartment lower region	11500

Attachment A (con't)

Equipment Name	Tag Number	Function	Power Group Number	Location	Room No.
Hydrogen Igniter 47	VLS-EH-47	Energize	1	Upper compartment lower region	11500
Hydrogen Igniter 48	VLS-EH-48	Energize	2	Upper compartment lower region	11500
Hydrogen Igniter 49	VLS-EH-49	Energize	1	Pressurizer compartment	11503
Hydrogen Igniter 50	VLS-EH-50	Energize	2	Pressurizer compartment	11503
Hydrogen Igniter 51	VLS-EH-51	Energize	1	Upper compartment mid-region	11500
Hydrogen Igniter 52	VLS-EH-52	Energize	2	Upper compartment mid-region	11500
Hydrogen Igniter 53	VLS-EH-53	Energize	2	Upper compartment mid-region	11500
Hydrogen Igniter 54	VLS-EH-54	Energize	1	Upper compartment mid-region	11500
Hydrogen Igniter 55	VLS-EH-55	Energize	1	Refueling cavity	11504
Hydrogen Igniter 56	VLS-EH-56	Energize	2	Refueling cavity	11504
Hydrogen Igniter 57	VLS-EH-57	Energize	2	Refueling cavity	11504
Hydrogen Igniter 58	VLS-EH-58	Energize	1	Refueling cavity	11504
Hydrogen Igniter 59	VLS-EH-59	Energize	2	Pressurizer compartment	11503
Hydrogen Igniter 60	VLS-EH-60	Energize	1	Pressurizer compartment	11503
Hydrogen Igniter 61	VLS-EH-61	Energize	1	Upper compartment-upper region	11500

Attachment A (con't)

Equipment Name	Tag Number	Function	Power Group Number	Location	Room No.
Hydrogen Igniter 62	VLS-EH-62	Energize	2	Upper compartment-upper region	11500
Hydrogen Igniter 63	VLS-EH-63	Energize	1	Upper compartment-upper region	11500
Hydrogen Igniter 64	VLS-EH-64	Energize	2	Upper compartment-upper region	11500
Hydrogen Igniter 65	VLS-EH-65	Energize	1	IRWST roof vents	11500
Hydrogen Igniter 66	VLS-EH-66	Energize	2	IRWST roof vents	11500

Attachment B

COL Appendix C Table 2.3.9-1

Equipment	Tag No.	Display
Containment Hydrogen Monitor	VLS-001	Yes
Containment Hydrogen Monitor	VLS-002	Yes
Containment Hydrogen Monitor	VLS-003	Yes