

NOV 24 2020

Docket Nos.: 52-025

ND-20-0952
10 CFR 52.99(c)(1)U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3
ITAAC Closure Notification on Completion of ITAAC 2.2.01.11a.i [Index Number 114]

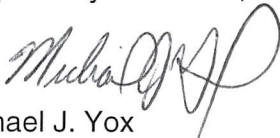
Ladies and Gentlemen:

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 2.2.01.11a.i [Index Number 114]. This ITAAC confirms that the Containment System motor-operated valves are qualified in accordance with the provisions of American Society of Mechanical Engineers (ASME) QME-1-2007 to perform their active safety-related function under design conditions. The closure process for this ITAAC is based on the guidance described in Nuclear Energy Institute (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 & 4Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.2.01.11a.i [Index Number 114]

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**Southern Nuclear Operating Company
ND-20-0952
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.2.01.11a.i [Index Number 114]**

ITAAC Statement

Design Commitment

11.a) The motor-operated and check valves identified in Table 2.2.1-1 perform an active safety-related function to change position as indicated in the table.

Inspections/Tests/Analyses

- i) Tests or type tests of motor-operated valves will be performed to demonstrate the capability of each valve to operate under design conditions.
- ii) Inspection will be performed for the existence of a report verifying that the as-built motor-operated valves are bounded by the tests or type tests.

Acceptance Criteria

- i) A test report exists and concludes that each motor-operated valve changes position as indicated in Table 2.2.1-1 under design conditions.
- ii) A report exists and concludes that the as-built motor-operated valves are bounded by the tests or type tests.

ITAAC Determination Basis

Multiple Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) were performed to demonstrate that the Containment System (CNS) motor-operated valves identified in the Combined License (COL) Appendix C, Table 2.2.1-1 perform an active safety-related function to change position as indicated in the table.

i) A test report exists and concludes that each motor-operated valve changes position as indicated in Table 2.2.1-1 under design conditions.

This portion of the subject ITAAC required tests or type tests of motor-operated valves to be performed to demonstrate the capability of the valve to operate under its design conditions.

The motor-operated valves identified in COL Appendix C, Table 2.2.1-1 were qualified in accordance with the provisions of American Society of Mechanical Engineers (ASME) QME-1-2007, Qualification of Active Mechanical Equipment Used in Nuclear Power Plants (Reference 1).

Functional qualification was performed under the design conditions identified in the design specification for the valves (Reference 2) to demonstrate that each motor-operated valve is qualified to perform its designated function when used in its intended service. In accordance with ASME QME-1-2007, qualification was substantiated by demonstrating the relationship between the service requirements and the type testing and analysis that was conducted as part of this qualification program.

Type testing was performed, including natural frequency determination, side load static deflection testing, final static seat and stem leakage testing, steam testing, and water testing, for the ranges of the pressure, temperature and flow for each valve and the maximum seat-sealing differential pressure. In accordance with ASME QME-1-2007, the functional qualification process for these motor-operated valve assemblies also included valve and actuator internal inspections and measurement, orientation requirements, seat and stem leakage limitations, diagnostic data collection and analysis methods,

static and dynamic flow diagnostic testing, and pressure locking and thermal binding evaluations. The qualification also followed the provisions of ASME QME-1-2007 for the extrapolation of functional qualification to another valve assembly, and demonstration of functional capability of production valve assemblies.

The results of the qualification are documented in the Equipment Qualification (EQ) Reports (Reference 3) which are identified in Attachment A for each applicable valve. These reports summarize the test methodology and ASME QME-1-2007 functional qualification that demonstrate that each motor-operated valve changes position as indicated in COL Appendix C, Table 2.2.1-1 under design conditions.

ii) A report exists and concludes that the as-built motor-operated valves are bounded by the tests or type tests.

This portion of the subject ITAAC required that an inspection be performed for the existence of a report verifying that the as-built motor-operated valves are bounded by tests or type tests.

The motor-operated valves in COL Appendix C, Table 2.2.1-1 were verified by type tests in accordance with section i) above, to demonstrate the capability of the valves to operate under their design conditions. The EQ Reports in Attachment A identify the equipment mounting employed for the testing and the specific conditions tested.

In accordance with the EQ ITAAC As-built Walkdown Guideline (Reference 4) and the EQ ITAAC As-built Installation Documentation Guideline (Reference 5), an inspection was conducted of the CNS to confirm the satisfactory installation of the motor-operated valves. The inspection included verification of equipment make/model/serial number, verification of equipment mounting and location, and verification that the mechanical and electrical connections are bounded by the tested conditions.

The documentation of installed configuration of the motor-operated valves includes photographs and/or sketches of equipment mounting and connections. The verification of installed equipment configuration is documented in As-Built EQ Reconciliation Reports (EQRRs) (Reference 6).

Attachment A identifies the EQRRs which verify that the installed configuration of the motor-operated valves identified in COL Appendix C, Table 2.2.1-1 are bounded by the tests or type tests.

Together, these EQ Reports and EQRRs (References 3 and 6), provide evidence that the ITAAC Acceptance Criteria requirements are met:

- A test report exists and concludes that each motor-operated valve changes position as indicated in Table 2.2.1-1 under design conditions; and
- A report exists and concludes that the as-built motor-operated valves are bounded by the tests or type tests.

References 3 and 6 are available for NRC Inspection as part of the Unit 3 ITAAC 2.2.01.11a.i Completion Package (Reference 7).

ITAAC Finding Review

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 was one relevant ITAAC finding associated with this ITAAC.

- Unresolved Item (URI) 05200025/2017002-02. (closed)

The corrective actions for this finding have been completed and the finding is closed. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.2.01.11a.i (Reference 7) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.2.01.11a.i 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. American Society of Mechanical Engineers (ASME) QME-1-2007, "Qualification of Active Mechanical Equipment Used in Nuclear Power Plants"
2. SV3-PV11-Z0-001, Revision 9, "Design Specification for Butterfly Valves, ASME Boiler and Pressure Vessel Code Section III, Class 2 and 3"
3. Equipment Qualification (EQ) Reports as Identified in Attachment A
4. ND-RA-001-014, EQ ITAAC As-built Walkdown Guideline, Version 3.1
5. ND-RA-001-016, EQ ITAAC As-built Installation Documentation Guideline, Version 1.0
6. As-Built Equipment Qualification Reconciliation Reports (EQRRs) as Identified In Attachment A
7. 2.2.01.11a.i-U3-CP-Rev0, ITAAC Completion Package

Attachment A

System: Containment System (CNS)

Equipment Name +	Tag No. +	Active Function +	EQ Reports (Reference 3)	As-Built EQRR (Reference 6)
Component Cooling Water System (CCS) Containment Isolation Motor-operated Valve (MOV) – Inlet Line Outside Reactor Containment (ORC)	CCS-PL-V200	Transfer Closed	SV3-PV11-VBR-005 / SV3-PV11-VBR-006	2.2.01.11a.i-U3-EQRR-PCD001
CCS Containment Isolation MOV – Outlet Line IRC	CCS-PL-V207	Transfer Closed	SV3-PV11-VBR-005 / SV3-PV11-VBR-006	2.2.01.11a.i-U3-EQRR-PCD001
CCS Containment Isolation MOV – Outlet Line ORC	CCS-PL-V208	Transfer Closed	SV3-PV11-VBR-005 / SV3-PV11-VBR-006	2.2.01.11a.i-U3-EQRR-PCD001
SFS Discharge Line Containment Isolation MOV – ORC	SFS-PL-V038	Transfer Closed	SV3-PV11-VBR-005 / SV3-PV11-VBR-006	2.2.01.11a.i-U3-EQRR-PCD003
SFS Suction Line Containment Isolation MOV – IRC	SFS-PL-V034	Transfer Closed	SV3-PV11-VBR-005 / SV3-PV11-VBR-006	2.2.01.11a.i-U3-EQRR-PCD002
SFS Suction Line Containment Isolation MOV – ORC	SFS-PL-V035	Transfer Closed	SV3-PV11-VBR-005 / SV3-PV11-VBR-006	2.2.01.11a.i-U3-EQRR-PCD003
Vacuum Relief Containment Isolation A MOV – ORC	VFS-PL-V800A	Transfer Closed / Transfer Open	SV3-PV11-VBR-005 / SV3-PV11-VBR-006	2.2.01.11a.i-U3-EQRR-PCD002
Vacuum Relief Containment Isolation B MOV – ORC	VFS-PL-V800B	Transfer Closed / Transfer Open	SV3-PV11-VBR-005 / SV3-PV11-VBR-006	2.2.01.11a.i-U3-EQRR-PCD002

Notes:

+ Excerpt from COL Appendix C Table 2.2.1-1