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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.6.01.02.i [Index Number 579]

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 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.6.01.02.i [Index Number 579]. This ITAAC confirms that the seismic Category I Main ac Power System equipment identified in the VEGP Unit 4 Combined License (COL) Appendix C, Table 2.6.1-1 can withstand seismic design basis loads without loss of safety function. 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 Kelli Roberts at 706-848-6991.
Respectfully submitted,

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Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion for ITAAC 2.6.01.02.i [Index Number 579]

JMC/AD/sfr

cc: Regional Administrator, Region II
Director, Office of Nuclear Reactor Regulation (NRR)
Director, Vogtle Project Office NRR
Senior Resident Inspector – Vogtle 3 & 4

Southern Nuclear Operating Company
ND-22-0586
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.6.01.02.i [Index Number 579]

ITAAC Statement

Design Commitment

2. The seismic Category I equipment identified in Table 2.6.1-1 can withstand seismic design basis loads without loss of safety function.

Inspections, Tests, Analyses

i) Inspection will be performed to verify that the seismic Category I equipment identified in Table 2.6.1-1 is located on the Nuclear Island.

ii) Type tests, analyses, or a combination of type tests and analyses of seismic Category I equipment will be performed.

iii) Inspection will be performed for the existence of a report verifying that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

Acceptance Criteria

i) The seismic Category I equipment identified in Table 2.6.1-1 is located on the Nuclear Island.

ii) A report exists and concludes that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function.

iii) A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

ITAAC Determination Basis

This ITAAC requires that inspections, tests, and analyses be performed and documented to ensure the Main ac Power System (ECS) equipment identified as seismic Category I or Class 1E in the Combined License (COL) Appendix C, Table 2.6.1-1 (the Table) are designed and constructed in accordance with applicable requirements.

i) The seismic Category I equipment identified in Table 2.6.1-1 is located on the Nuclear Island.

To assure that seismic Category I equipment can withstand seismic design basis loads without loss of safety function, all the equipment in the Table is designed to be located on the seismic Category I Nuclear Island. In accordance with Equipment Qualification (EQ) Walkdown ITAAC Guideline and the EQ ITAAC As-Built Installation Documentation Guideline (References 1 and 2), an inspection was conducted of the ECS to confirm the satisfactory installation of the seismically qualified equipment. The inspection includes verification of equipment make/model/serial number and verification of equipment location (Building, Elevation, Room). The EQ As-Built Reconciliation Reports (EQRR) (Reference 3) identified in Attachment A document the results of the inspection and conclude that the seismic Category I equipment is located on the Nuclear Island.

ii) A report exists and concludes that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function.

Seismic Category I equipment in the Table requires type tests and/or analyses to demonstrate structural integrity and operability. Safety-related (Class 1E) electrical equipment in the Table was seismically qualified by type testing combined with analysis in accordance with Institute of Electrical and Electronics Engineers (IEEE) Standard 344-1987 (Reference 4). The specific qualification method (i.e., type testing, analysis, or combination) used for each piece of equipment in the Table is identified in Attachment A. Additional information about the methods used to qualify AP1000 safety-related equipment is provided in the Updated Final Safety Analysis Report (UFSAR) Appendix 3D (Reference 5). The EQ Reports (Reference 6) identified in Attachment A contain applicable test reports and associated documentation and conclude that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function.

iii) A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

An inspection (References 1 and 2) was conducted to confirm the satisfactory installation of the seismically qualified equipment in the Table. The inspection verifies the equipment make/model/serial number, as-designed equipment mounting orientation, anchorage and clearances, and electrical and other interfaces. The documentation of installed configuration of seismically qualified equipment includes photographs and/or sketches/drawings of equipment/mounting/interfaces.

As part of the seismic qualification program, consideration is given to the definition of the clearances needed around the equipment mounted in the plant to permit the equipment to move during a postulated seismic event without causing impact between adjacent pieces of safety-related equipment. When required, seismic testing by measuring the maximum dynamic relative displacement of the top and bottom of the equipment was performed. EQ Reports (Reference 6) identified the equipment mounting employed for qualification and establish interface requirements for assuring that subsequent in-plant installation does not degrade the established qualification. Interface requirements are defined based on the test configuration and other design requirements.

Attachment A identifies the EQRR (Reference 3) completed to verify that the as-built seismic Category I equipment listed in the Table, including anchorage, are seismically bounded by the tested or analyzed conditions, IEEE Standard 344-1987 (Reference 4) and NRC Regulatory Guide (RG) 1.100 (Reference 7).

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

- The seismic Category I equipment identified in Table 2.6.1-1 is located on the Nuclear Island;

- A report exists and concludes that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function; and

- A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

References 3 and 6 are available for NRC inspection as part of the Unit 4 ITAAC 2.6.01.02.i Completion Package (Reference 8).

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 finding review, which included now-consolidated ITAAC Indexes 580 and 581, found there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.6.01.02.i (Reference 8) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.6.01.02.i was performed for VEGP Unit 4 and that the prescribed acceptance criteria are 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. ND-RA-001-014, EQ ITAAC As-built Walkdown Guideline, Version 3.1

2. ND-RA-001-016, "EQ ITAAC As-built Installation Documentation Guideline", Version 1.0

3. EQ As-Built Equipment Qualification Reconciliation Report (EQRR) as identified in Attachment A

4. IEEE Standard 344-1987, IEEE Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations

5. Vogtle 3&4 Updated Final Safety Analysis Report Appendix 3D, Methodology for Qualifying AP1000 Safety-Related Electrical and Mechanical Equipment, Revision 11.1

6. Equipment Qualification (EQ) Reports as identified in Attachment A

7. Regulatory Guide 1.100, Seismic Qualification of Electric and Mechanical Equipment for Nuclear Power Plants, Revision 2

8. 2.6.01.02.i-U4-CP-Rev0, Completion Package for Unit 4 ITAAC 2.6.01.02.i [Index Number 579]

Attachment A

System: Main ac Power System (ECS)

Equipment Name +	Tag No. +	Seismic Cat. I +	Type of Qual.	EQ Reports (Reference 5)	As-Built EQRR (Reference 2) *
Reactor Coolant Pump (RCP) Circuit Breaker	ECS-ES-31	Yes	Type Test & Analysis	SV4-ES02-VBR-003 / SV4-ES02-VBR-001	2.6.01.02.i-U4-EQRR-PCD001-Rev0
RCP Circuit Breaker	ECS-ES-32	Yes	Type Test & Analysis	SV4-ES02-VBR-003 / SV4-ES02-VBR-001	2.6.01.02.i-U4-EQRR-PCD001-Rev0
RCP Circuit Breaker	ECS-ES-41	Yes	Type Test & Analysis	SV4-ES02-VBR-003 / SV4-ES02-VBR-001	2.6.01.02.i-U4-EQRR-PCD001-Rev0
RCP Circuit Breaker	ECS-ES-42	Yes	Type Test & Analysis	SV4-ES02-VBR-003 / SV4-ES02-VBR-001	2.6.01.02.i-U4-EQRR-PCD001-Rev0
RCP Circuit Breaker	ECS-ES-51	Yes	Type Test & Analysis	SV4-ES02-VBR-003 / SV4-ES02-VBR-001	2.6.01.02.i-U4-EQRR-PCD001-Rev0
RCP Circuit Breaker	ECS-ES-52	Yes	Type Test & Analysis	SV4-ES02-VBR-003 / SV4-ES02-VBR-001	2.6.01.02.i-U4-EQRR-PCD001-Rev0
RCP Circuit Breaker	ECS-ES-61	Yes	Type Test & Analysis	SV4-ES02-VBR-003 / SV4-ES02-VBR-001	2.6.01.02.i-U4-EQRR-PCD001-Rev0
RCP Circuit Breaker	ECS-ES-62	Yes	Type Test & Analysis	SV4-ES02-VBR-003 / SV4-ES02-VBR-001	2.6.01.02.i-U4-EQRR-PCD001-Rev0

Notes:

+ Excerpt from COL Appendix C Table 2.6.1-1