



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

November 8, 2023

Jamie Coleman, Director
Fleet Regulatory Affairs
Southern Nuclear Operating Company, Inc.
3535 Colonnade Parkway, BIN 63031
Birmingham AL 35243

**SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNIT 4 - NRC INITIAL TEST
PROGRAM AND OPERATIONAL PROGRAMS INTEGRATED INSPECTION
REPORT 05200026/2023008**

Dear Jamie Coleman:

On September 30, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Vogtle Electric Generating Plant, Unit 4. On October 24, 2023, the NRC inspectors discussed the results of this inspection with Mr. Glen Chick, Vogtle Electric Generating Plant (VEGP) Units 3 & 4 Executive Vice President and other members of your staff. The results of this inspection are documented in the enclosed report.

The inspection examined a sample of construction activities conducted under your Combined License (COL) as it relates to safety and compliance with the Commission's rules and regulations and with the conditions of these documents. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any), will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

J. Coleman

2

Should you have any questions concerning this letter, please contact us.

Sincerely,

 Signed by Davis, Bradley
on 11/08/23

Bradley J. Davis, Chief
Construction Inspection Branch 2
Division of Construction Oversight

Docket Nos.: 5200026

License Nos: NPF-92

Enclosure:

As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNIT 4 - NRC INITIAL TEST PROGRAM AND OPERATIONAL PROGRAMS INTEGRATED INSPECTION REPORT 05200026/2023008 Dated November 8, 2023

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J. Eargle, DCO

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**U.S. NUCLEAR REGULATORY COMMISSION
Region II**

Docket Numbers: 05200026

License Numbers: NPF-92

Report Numbers: 05200026/2023008

Licensee: Southern Nuclear Operating Company, Inc

Facility: Vogtle Unit 4 Combined License

Location: Waynesboro, GA

Inspection Dates: July 1, 2023, through September 30, 2023

Inspectors: J. Eargle, Senior Resident Inspector - Testing, Division of Construction Oversight (DCO)
S. Egli, Sr. Construction Inspector, DCO
J. Montgomery, Senior Reactor Inspector, Division of Reactor Safety (DRS)
A. Nielsen, Senior Health Physicist, DRS
J. Parent, Resident Inspector, DCO
M. Riley, Senior Construction Inspector, DCO
C. Even, Senior Construction Inspector, DCO

Approved by: Bradley J. Davis, Chief
Construction Inspection Branch 2
Division of Construction Oversight

SUMMARY OF FINDINGS

Inspection Report (IR) 05200026/2023008; July 1, 2023 – September 30, 2023; Vogtle Unit 4 Combined License, initial test program and operational programs integrated inspection report.

This report covers a three-month period of announced inspections of startup testing and operational programs by resident and regional inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, or Red), using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process." Cross-cutting aspects are determined using IMC 0310, "Aspects Withing the Cross-Cutting Areas." All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy. The NRC's program for oversight of AP1000 start-up activities is described in IMC 2514, "AP1000 Reactor Inspection Program – Startup Testing Phase."

A. NRC-Identified and Self Revealed Findings

None

B. Licensee-Identified Violations

None

REPORT DETAILS

Summary of Plant Construction Status

During this report period for Unit 4, the licensee notified NRC on July 20, 2023, that it completed all ITAAC in Appendix C of the Vogtle Unit 4 Combined License, and NRC issued the 10 CFR 52.103(g) finding on July 28, 2023, which authorized the licensee to load fuel and begin operation of the unit in accordance with the terms and conditions of the combined license (ML22348A094).

The licensee performed preoperational and component tests of various structures, systems, and components and their control systems, e.g., protection and safety monitoring system (PMS), plant control system, and main control room emergency habitability system. Reactor vessel internals inspection was performed to verify the as-built reactor internals had no observable damage or loose parts from hot functional testing. Class 1E direct current and uninterruptible power supply system and electrical distribution system testing was performed to verify the functional capability of those systems to support electrical loads during normal and off-normal conditions. Preoperational testing of safety-related valves was performed for the containment system isolation valves. Fire protection testing was performed to verify components and systems could detect and suppress a fire in an area with safety-related equipment.

1. CONSTRUCTION REACTOR SAFETY

**Cornerstones: Design/Engineering, Procurement/Fabrication,
Construction/Installation, Inspection/Testing**

IMC 2503, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) - Related Work Inspections

1A01 (Unit 4) ITAAC Number 2.3.04.04.ii (331) / Family 15D

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 2.3.04.04.ii (331). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.15 - Inspection of ITAAC-Related Installation of Fire Protection Equipment

The inspectors used appropriate portions of the IP to review the test results for determining whether water was simultaneously discharged from each of the two highest fire-hose stations in plant areas containing safety-related equipment at not less than 75 gallons per minute. The inspectors reviewed the test results to verify if they satisfied the technical requirements of the UFSAR and ITAAC.

b. Findings

No findings were identified.

1A02 (Unit 4) ITAAC Number 2.3.04.10 (337) / Family 15C

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 2.3.04.10 (337). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.15-02.08 - Fire Detection and Alarm Systems

The inspectors used appropriate portions of the IP to review fire detector test results to verify if the fire detectors responded to simulated fire conditions. The inspectors reviewed the fire detector test records to verify if they satisfied the technical requirements of the UFSAR and ITAAC.

b. Findings

No findings were identified.

1A03 (Unit 4) ITAAC Number 3.3.00.07c.ii.a (797) / Family 15A

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 3.3.00.07c.ii.a (797). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.15 - Inspection of ITAAC-Related Installation of Fire Protection Equipment

The inspectors used appropriate portions of the IP to walkdown fire areas in the auxiliary building to verify if fire barriers existed between fire areas. The inspectors walked down the fire barriers in the plant to verify if the fire barriers satisfied the quality and technical requirements of the UFSAR and the ITAAC.

The inspectors used appropriate portions of the IP to review fire barrier installations in the auxiliary building to verify if the barriers existed between fire areas. The inspectors also reviewed records of fire barrier installations to verify if the barriers satisfied the quality and technical requirements of the UFSAR and the ITAAC.

b. Findings

No findings were identified.

1A04 (Unit 4) ITAAC Number 3.3.00.07c.ii.b (798) / Family 15A

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 3.3.00.07c.ii.b (798). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.15 - Inspection of ITAAC-Related Installation of Fire Protection Equipment

The inspectors used appropriate portions of the IP to walkdown fire areas in the radiologically controlled area of the auxiliary building to verify if fire barriers existed between fire areas. The inspectors walked down the fire barriers in the plant to verify if the fire barriers satisfied the technical requirements of the UFSAR and the ITAAC.

The inspectors used appropriate portions of the IP to review fire barrier installation records in the radiologically controlled area of the auxiliary building to verify if fire barriers existed between fire areas. The inspectors reviewed the fire barrier installation records to verify if they satisfied the technical requirements of the UFSAR and ITAAC.

b. Findings

No findings were identified.

3. OPERATIONAL READINESS

Cornerstones: Operational Programs

IMC 2503, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) - Related Work Inspections

3T01 (Unit 4) ITAAC Number 2.1.03.07.i (78) / Family 05D

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 2.1.03.07.i (78). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.D-02.03-Test Results Review

The inspectors used appropriate portions of the IP to review the results of the following procedure used to determine if the as-built reactor internals had no observable damage or loose parts following hot functional testing. The inspection results were

reviewed to verify if they satisfied the applicable quality and technical requirements of the Updated Final Safety Analysis Report (UFSAR) and the ITAAC.

- 4-RXS-ITPP-501, Pre - and Post - Hot Functional Test Inspection of Reactor Vessel Internals, Ver. 1.0

b. Findings

No findings were identified.

3T02 (Unit 4) ITAAC Number 2.2.01.11a.iv (117) / Family 07D

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 2.2.01.11a.iv (117). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.D-02.02-Test Witnessing

The inspectors used the appropriate portions of the IP to observe the licensee's performance of the following procedure used to verify if containment supply containment isolation check valve 4-DWS-V245 performed its safety-related function to change position. The test was observed to verify if it satisfied the applicable quality and technical requirements of the UFSAR and the ITAAC.

- 4-DWS-OTS-17-001, Demineralized Water Transfer and Storage System Check Valve Exercise, Ver. 1.0

b. Findings

No findings were identified.

3T03 (Unit 4) ITAAC Number 2.2.05.07a.i (265) / Family 12D

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 2.2.05.07a.i (265). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.D-02.03-Test Results Review

The inspectors used the appropriate portions of the IP to review the licensee's test results to verify if the main control room emergency habitability system maintained the main control room pressure boundary to greater than or equal to 1/8-in. water gauge with respect to the surrounding area while air leakage into the main control room

remained less than or equal to 10 cfm. The test results were reviewed to verify if they satisfied the applicable quality and technical requirements of the UFSAR and the ITAAC.

- SV4-VES-ITR-802265, Unit 4 Main Control Room Emergency Habitability System (VES) Pressure, Flow and Noise: ITAAC 2.2.05.07a.i Items 7.a, 7.b, 7.d and 12, Rev. 0

b. Findings

No findings were identified.

3T04 (Unit 4) ITAAC Number 2.2.05.07c (270) / Family 12F

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 2.2.05.07c (270). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.D-02.03-Test Results Review

The inspectors used the appropriate portions of the IP to review the licensee's analyzed test results to verify if the temperature and humidity in the main control room remained within limits for reliable human performance for the 72-hour period, the maximum temperature for the 72-hour period for the instrument and control rooms remained less than or equal to 120°F, and the maximum temperature for the 72-hour period for the Class 1E direct current equipment rooms remained less than or equal to 120°F. The test results were reviewed to verify if they satisfied the applicable quality and technical requirements of the UFSAR and the ITAAC.

- SV4-VES-T2R-001, Vogtle Unit 4 Six Hour Main Control Room Heatup Summary Report, Rev. 0

b. Findings

No findings were identified.

3T05 (Unit 4) ITAAC Number 2.5.02.06a.ii (530) / Family 10D

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 2.5.02.06a.ii (530). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.D-02.03-Test Results Review

The inspectors used the appropriate portions of the IP to review the licensee's test results to verify if actuation signals were generated for a manual reactor trip. The test was observed and results were reviewed to verify if the test satisfied the applicable quality and technical requirements of the UFSAR and the ITAAC.

- 4-PMS-ITPP-504, PMS Reactor Trip Breakers, Rev. 1.1

The inspectors used the appropriate portions of the IP to review the licensee's test results to verify if PMS output signals were generated for reactor trip and selected engineered safety features after the manual initiation controls were actuated and fixed position controls were displayed and alarmed in the control room. The ITAAC test results report, and listed references were reviewed to verify if the test results satisfied the applicable quality and technical requirements of the UFSAR and the ITAAC.

- B-GEN-ITPCI-006, Main Control Room & Remote Shutdown Room, Rev. 4

The inspectors used appropriate portions of the IP to review the following factory acceptance test packages to verify if the PMS initiated an automatic reactor trip and engineered safety feature actuation when plant signals reached specified limits. The test procedures and results associated with containment isolation, automatic depressurization system stages 1-3, containment cooling, in-containment refueling water storage tank injection, residual heat removal system isolation and containment vacuum relief were reviewed to verify if the results satisfied the applicable quality and technical requirements of the UFSAR and the ITAAC.

- SV0-PMS-T2R-407, Vogtle AP1000 Protection and Safety Monitoring System System-Level Reactor Trip Channel Integration Test Report, Rev. 0
- SV0-PMS-T2R-408, Vogtle AP1000 Protection and Safety Monitoring System System-Level Engineered Safety Features Channel Integration Test Report, Rev. 0
- ITAAC 2.5.02.06a.ii (item 6.a.ii) PCD, 02/25/22
- ITAAC 2.5.02.06a.ii (item 6.b) PCD, 05/13/22

The inspectors used the appropriate portions of the IP to review the licensee's test results to verify if PMS did not allow simultaneous bypass of two redundant channels. The inspectors reviewed the test results to verify if the test satisfied the applicable quality and technical requirements of the UFSAR and ITAAC.

- 4-PMS-ITPP-521, Protection and Safety Monitoring System Logic Test Preoperational Test Procedure, Rev. 1

The inspectors used appropriate portions of the IP to review the PMS cabinet energization and diagnostics to verify if PMS output signals to the reactor trip switchgear were generated after the test signal reached the specified limit. The inspectors reviewed the test results to verify if the test satisfied the applicable quality and technical requirements of the UFSAR and the ITAAC.

- B-GEN-ITPCI-001-011, PMS Cabinets - Cabinet Diagnostics, Rev 2.1

- B-GEN-ITPCI-001-012, PMS Cabinets - Division Diagnostics, Rev. 1

The inspectors also used appropriate portions of the IP to review the licensee's test results used to verify if:

- (1) PMS output signals were generated for reactor trip and selected engineered safety features after the manual initiation controls are actuated
- (2) PMS provided manual initiation of reactor trip and engineered safety features
- (3) PMS provided for the minimum inventory of displays, visual alerts, and fixed position controls in the main control room
- (4) Displays of the open/closed status of the reactor trip breakers could be retrieved in the main control room
- (5) PMS blocks were automatically removed when the test signal reached the specified limit
- (6) PMS two-out-of-four initiation logic reverted to a two-out-of-three coincidence logic if one of the four channels was bypassed and all bypassed channels were alarmed in the main control room.

The test results were reviewed to determine whether they contained sufficient information to meet the applicable quality and technical requirements of the UFSAR and the ITAAC.

- 2.5.02.06a.ii ITAAC Technical Report, SV4-PS Cabinet Software Loading-001, Rev. 0
- 2.5.02.06a.ii ITAAC Technical Report, SV4-PS Cabinet Diagnostic Testing-001, Rev. 0
- SV4-PMS_ITR-800530, Unit 4 PMS Manual Initiation Controls and Reactor Trip Breaker displays: ITAAC 2.5.02.06a.ii Items 6.c)ii, 8.a)iii and 8.c, Rev. 0
- SV4-PMS-ITR-801530, U4 PMS Main Control Room Displays: ITAAC 2.5.02.06a.ii Item 8.a)i, Rev. 0
- SV4-PMS-ITR-802530, U4 Recorded Results of PMS Auto Block Removal Test: ITAAC 2.5.02.06a.ii Item 9.a, Rev. 0
- SV4-PMS-ITR-801530, U4 PMS Channel Bypass Alarm Test: ITAAC 2.5.02.06a.ii Item 9.b, Rev. 0

b. Findings

No findings were identified.

3T06 (Unit 4) ITAAC Number 2.6.03.04c (603) / Family 08D

a. Inspection Scope

The inspectors performed a direct inspection of construction activities associated with ITAAC Number 2.6.03.04c (603). The inspectors used the following NRC IPs/sections to perform this inspection:

- 65001.D-02.02-Test Witnessing
- 65001.D-02.03-Test Results Review

The inspectors used the appropriate portions of the IP to observe the Class 1E direct current and uninterruptable power supply system preoperational tests to verify if the Division C 72-hour inverter supplied a line-to-line output voltage of $208 \pm 2\%$ V at a frequency of $60 \pm 0.5\%$ Hz. The inspectors observed the test to verify if it met the technical and quality requirements of the UFSAR and ITAAC.

- 4-IDS-ITPP-507, IDSC Class 1E DC and UPS Preoperational Test, Ver. 1.0
- 4-GEN-ITPCE-011, Class 1E DC Inverter Capacity Test, Static Transfer Switch Test, And Regulating Transformer Capacity Test, Ver. 1

The inspectors used the appropriate portions of the IP to review the Class 1E direct current and uninterruptable power supply system test results to verify if the:

- 1) batteries could supply power to the direct current switchboard loads at the required voltage for the required design duty cycle;
- 2) battery chargers supplied required output current and voltage to the direct current switchboard bus loads while maintaining the corresponding battery charged;
- 3) battery chargers provided the PMS with two loss of voltage input signals;
- 4) inverters could supply their alternating current loads with the required voltage and frequency;
- 5) regulating transformers could supply alternating current loads at the required voltage when powered from their 480 Volt motor control centers; and
- 6) safety displays could be retrieved in the main control room.

The test packages were reviewed as part of the ITAAC Technical Report to verify if the test results satisfied the applicable quality and technical requirements of the UFSAR and ITAAC.

- 2.6.03.04c-U4-PRF ITAAC 603 Charger FAT PCD, Rev. 0
- SV4-IDS-ITR-800603, U4 Recorded Results of Battery Bank Testing: ITAAC 2.6.03.04c Items 4.c, 4.d, 4.e, Rev. 0
- SV4-IDS-ITR-801603, U4 Recorded Results of Battery Bank Testing: ITAAC 2.6.03.04c Items 4.f, 4.g, Rev. 0
- SV4-IDS-ITR-802603, U4 Recorded Results of Battery Bank Testing: ITAAC 2.6.03.04c Item 5.c, Rev. 0
- SV4-IDS-ITR-803603, U4 Recorded Results of Battery Bank Testing: ITAAC 2.6.03.04c Items 5.a, 5.b, Rev. 0
- SV4-IDS-ITR-804603, U4 Recorded Results of Battery Bank Testing: ITAAC 2.6.03.04c Items 6 and 11, Rev. 0
- SV4-IDS-ITR-805603, U4 Recorded Results of Battery Bank Testing: ITAAC 2.6.03.04c Items 4.h, Rev. 0

b. Findings

No findings were identified.

IMC 2504, Construction Inspection Program – Inspection of Construction and Operational Programs

3P01 Initial Test Program (Startup)

a. Inspection Scope

The inspectors used appropriate portions of the IP to observe the licensee's performance of the following procedures for meeting the prerequisites for Unit 4 to enter mode 6 and perform initial fuel load. The inspectors observed the conduct of these procedures to verify if they satisfied the applicable quality and technical requirements of the UFSAR and the Technical Specifications.

- 4-GOP-301-006, Mode 6 Change Checklists, Ver. 1
- 4-GOP-305, Refueling Mode 6, Ver. 1
- 4-GEN-ITPS-601, Initial Fuel Loading Startup Test Procedure, Ver. 1
- NMP-RE-011-F01, U4C1 Core Loading, Ver. 1.1

The inspectors used the appropriate portions of the IP to review the results of the post fuel load core verification to verify if all fuel assemblies were loaded into the vessel in the correct location and orientation consistent with the prespecified configuration for the initial reactor core. The inspectors reviewed the results to verify if they met the technical and quality requirements of the UFSAR and the Technical Specifications.

- NMP-RE-007, Core Verification, Attachment 1, Core Load Certification, Ver. 6.0
- NMP-RE-007-F03, Vogtle 3&4 - Core Verification Signoff, Ver. 1.0

b. Findings

No findings were identified.

3P02 Process and Effluent Monitoring

a. Inspection Scope

- 84528 – Part 52, Liquid Waste Management Program

Minimum Inspection Requirement B: Permanently Installed and Mobile Systems

The inspectors conducted a walkdown of the licensee's liquid radwaste system (WLS) to observe the status of installed liquid radwaste processing components. The inspectors reviewed the configuration to verify if the installed WLS components reflected the descriptions referenced in UFSAR Chapter 11. The inspectors observed the following system components:

- 4-WLS-MT-01, Reactor Coolant Drain Tank (RCDT)
- 4-WLS-MP-01A, Reactor Coolant Drain Pump A

- 4-WLS-MP-01B, Reactor Coolant Drain Pump B
- 4-WLS-V001A, Reactor Coolant Drain Valve A
- 4-WLS-V001B, Reactor Coolant Drain Valve B
- 4-WLS-ME-01, RCDT Heat Exchanger
- 4-WLS-MT-02, Containment Sump
- 4-WLS-MP-02A, Containment Sump Pump A
- 4-WLS-MP-02B, Containment Sump Pump B
- 4-WLS-MV-01, Degasifier Column
- 4-WLS-MP-04A, Degasifier Discharge Pump A
- 4-WLS-MP-04B, Degasifier Discharge Pump B
- 4-WLS-MV-02, Degasifier Separator
- 4-WLS-V030, Degasifier Vessel outlet isolation valve
- 4-WLS-V120, Waste Processing 3-way automatic operated valve
- 4-WLS-V224, Monitor Tanks D/E/F Discharge Line header isolation valve
- 4-WLS-MP-12, Chemical Waste Tank Pump
- 4-WLS-V322, Chemical Waste Tank Pump discharge check valve
- 4-WLS-JE-229, Liquid Radwaste Discharge Line radiation monitor
- 4-WLS-FT-232, Liquid Radwaste Discharge Line flow meter
- 4-WLS-V223, Liquid Radwaste Discharge Line isolation valve

The inspectors also verified that liquid radwaste system components volumes as-built were in accordance with the specifications in UFSAR Chapter 11. Volumes of the following component were verified:

- 4-WLS-MT-06A-Waste Holdup Tank A
- 4-WLS-MT-06B-Waste Holdup Tank B
- 4-WLS-MT-05A-Effluent Holdup Tank A
- 4-WLS-MT-05B-Effluent Holdup Tank B
- 4-WLS-MT-08A-Monitor Tank A
- 4-WLS-MT-08B-Monitor Tank B
- 4-WLS-MT-08C-Monitor Tank C
- 4-WLS-MT-08D-Monitor Tank D
- 4-WLS-MT-08E-Monitor Tank E
- 4-WLS-MT-08F-Monitor Tank F

Minimum Inspection Requirement C: Liquid Sampling

The inspectors' walkdowns included the liquid sampling room. The inspectors walked down rooms to determine if the room was fitted with a liquid sampling panel and they reviewed the licensee's records of the acceptance testing of the liquid sampling panel, and verified the licensee could collect and analyze post-accident samples of the liquid radwaste system as required by UFSAR Chapter 11.

Minimum Inspection Requirement D: Pre-operational Testing Review

Selected pre-operational testing results were reviewed to verify operational readiness of important system components. The following pre-operational tests were reviewed against UFSAR Chapter 14 testing requirements.

- WO 1205789, 4-WLS-JE-FT232, Component Testing

- SV4-WLS-ITR-801444 (Rev. 0), Unit 4 Liquid Radwaste System WLS Release Isolation: ITAAC 2.3.10.07a.ii, Item 7b

Minimum Inspection Requirement E: Process and Effluent Radiation Monitors and Instrumentation

The inspectors reviewed the primary calibration, calibration source certificates, and site acceptance testing records for the liquid radwaste discharge radiation monitor (4-WLS-JS-229) to verify accurate detector operation, calibration source traceability to manufacturer primary calibration, and to verify compliance with 10 Code of Federal Regulations Part 20, the Offsite Dose Calculation Manual, UFSAR Chapter 11, and Technical Specifications 5.5.

The inspectors observed that plant operators in the Vogtle Unit 4 main control room were able to access the plant control system and obtain indications from the radiation monitoring system for the 4-WLS-JS-229 liquid radwaste discharge line radiation monitor.

The following related records were reviewed.

- 04644601-SAT GA 4-WLS-JS-229 Primary Calibration, including transfer calibration.
- NIST Traceable Calibration Certificate for sealed sources:
 - Sn: 1640,19-3
 - Sn: 1640-39-3
 - Sn: 1640-39-5
 - Sn: 1636-3-8

b. Findings

No findings were identified.

3P03 Radiation Protection

a. Inspection Scope

- 83534 - Part 52, Internal Exposure Control and Assessment

Minimum Inspection Requirement B: Airborne Radioactivity Mitigation

The inspectors performed a walkdown of the Unit 4 installed main control room high efficiency particulate air (HEPA)/charcoal ventilation filtration system, nuclear island nonradioactive ventilation system "A" & "B". The inspectors also reviewed the following testing records for the main control room HEPA/charcoal ventilation filtration system against the requirements of Technical Specifications (TS) 5.5.13:

- NUCON International Inc., Radioiodine Test Report, MCR Emergency Air Filter, 4-VES-MS-05, 04/20/2023
- NUCON International Inc, In-Place Test Report, 04/24/2023

- NUCON International Inc, Acceptance for In-Place Testing, VBS “A”, 04/20/2023
- NUCON International Inc, Acceptance for In-Place Testing, VBS “B”, 04/20/2023

Minimum Inspection Requirement C: Respiratory Equipment Availability

The inspectors performed a walkdown of the Unit 4 control room to verify if 11 self-contained breathing apparatus (SCBA) and spare masks were available and ready for use and 4 SCBAs were available and ready for use at the Unit 4 Radiation Protection control point as required by UFSAR Chapter 12.

Minimum Inspection Requirement D: Air Sampling and Airborne Monitoring Equipment

The inspectors performed a walkdown of Building No. 322, Radioactive Material & Equipment Storage Building, to verify if 8 portable Mirion Technologies (MGP) airborne particulate monitors were available for future installation as required by UFSAR Chapters 11 and 12.

- 83535 - Part 52, Control of Radioactive Materials and Contamination, Surveys, and Monitoring

Minimum Inspection Requirement B: Area Radiation and Airborne Radioactivity Monitors

The inspectors performed a walkdown of the following Unit 4 installed area radiation monitors, including local digital displays in the auxiliary building, radwaste building, and the MCR and compared the observations against UFSAR Chapter 12 requirements.

- PXS-JS-160, Containment High Range
- PXS-JS-161, Containment High Range
- PXS-JS-162, Containment High Range
- PXS-JS-163, Containment High Range
- RMS-JS-08, Auxiliary Building Primary Sampling Room
- RMS-JS-09, Containment Building Personnel Hatch 135'
- RMS-JS-10, MCR
- RMS-JS-12, Auxiliary Building Fuel Handling Area
- RMS-JS-14, Radwaste Building
- RMS-JS-17, Radwaste Building
- RMS-JS-20, Auxiliary Building Fuel Handling Area
- RMS-JS-21, Containment Building Personnel Hatch 100'

The inspectors reviewed the following calibration records for installed Unit 4 area radiation monitors and verified the testing was performed in accordance with UFSAR Chapter 12.

- Site Acceptance Test (SAT) Procedure, Containment High Range Monitor, SV4-PXS- JE-RY160, 08/02/2023

- Site Acceptance Test (SAT) Procedure, Containment High Range Monitor, SV4-PXS- JE-RY161, 03/01/2023
- Site Acceptance Test (SAT) Procedure, Containment High Range Monitor, SV4-PXS- JE-RY162, 02/28/2023
- Site Acceptance Test (SAT) Procedure, Single Channel GM Tube Area Monitor [MCR], SV4-RMS-JE-RY010, 06/30/2023
- Site Acceptance Test (SAT) Procedure, Containment High Range Monitor, SV4-PXS- JE-RY160, 08/02/2023

Minimum Inspection Requirement C: Portable Survey Instruments

The inspectors noted that portable survey instruments will be shared between Units 3 and 4. The inspectors verified that the requirements of UFSAR Chapter 12 to have a sufficient number of calibrated and operable portable instruments for both units were met. The inspectors also walked down the Unit 4 location where portable instruments will be stored and issued for use.

- 83536 - Part 52, Facilities and Equipment

Minimum Inspection Requirement B: Decontamination Facilities

The inspectors performed a walkdown of the Unit 4 personnel decontamination facilities and verified completion, including installation of showers, as required by UFSAR Chapter 12.

Minimum Inspection Requirement C: RCA Entrance and Exit

The inspectors performed a walkdown of Building No. 322, Radioactive Material & Equipment Storage Building, Building No. 153, Post Security Guard House, and the Unit 4 Truck Bay, where the following instruments were stored and ready to be installed as required by UFSAR Chapter 12.

- 6 GEM-5 portal monitors
- 6 ARGOS-5AB personnel contamination monitors
- 2 SAM-12A small article monitors

Minimum Inspection Requirement D: Facilities for Storage of Contaminated Tools

The inspectors performed a walkdown of the location where contaminated tools and equipment will be stored and controlled for decontamination as required by UFSAR Chapter 12.

b. Findings

No findings were identified.

4. OTHER INSPECTION RESULTS

4OA6 Meetings, Including Exit

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Exit Meeting.

On October 24, 2023, the inspectors presented the inspection results to Mr. G. Chick, VEGP 3 & 4 Executive Vice President, and other licensee and contractor staff members. Proprietary information was reviewed during the inspection period but was not included in the inspection report.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licenses and Contractor Personnel

S. Briggs, Testing and Turnover Director
A. Nix, ITP Director
E. Loehlein, Operations Director
J. Coleman, Regulatory Affairs Director
R. Nicoletto, NI Manager
S. Leighty, Regulatory Affairs Manager
W. Garrett, Licensing Manager
T. Takats, Electrical Manager
K. Roberts, ITAAC Manager
J. Olsen, NI Supervisor
D. Johnson, Maintenance Supervisor
G. Bauer, Electrical Supervisor

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>Type</u>	<u>Status</u>	<u>Description</u>
None			

LIST OF DOCUMENTS REVIEWED

Section 1A01

Work Orders

1257439
1257440

Procedures

APP-PMS-J3-377, AP1000 Detailed Functional Diagram RNS Containment Manual Actuation and Reset Control, Rev. 7

Section 1A02

Procedures

4-IDS-ITPP-507, IDSC Class 1E DC and UPS Preoperational Test, Ver. 1.0
4-GEN-ITPCE-011, Class 1E DC Inverter Capacity Test, Static Transfer Switch Test, And Regulating Transformer Capacity Test, Ver. 1

Work Order

1290478

3. OPERATIONAL READINESS

Section 3T01

Documents:

4-RXS-ITPP-501, Pre - and Post - Hot Functional Test inspection of Reactor Vessel Internals, Ver. 1.0
SV4-CVAP-T2R-100, Vogtle Unit 4 Pre-Hot Functional Test Visual Report of the AP1000 Reactor Vessel Internals, Rev. 0
SV4-CVAP-T2R-400, Vogtle Unit 4 Post-Hot Functional Test Visual Inspection Report of the AP1000 Reactor Vessel Internals, Rev. 0
SV4-CVAP-T2R-300, Comprehensive Vibration Assessment Program (CVAP) Final Report for the Southern Vogtle Unit 4 (SV4) AP1000 Plant, Rev. 0
SV4-RXS-ITR-800078, Unit 4 Reactor Vessel Pre and Post Hot Functional Test Inspection: ITAAC 2.1.03.07.i, NRC Index Number: 78, Rev. 0
ND-23-0588, Southern Nuclear Operating Company, Vogtle Electric Generating Plant Unit 4, ITAAC Closure Notification on Completion of ITAAC Item 2.1.03.07.i [Index Number 78], Dated July 14, 2023
ITAAC No. 2.1.03.07.i [Index Number 78] Completion Package
WDI-PJF-1324185-EPP-001, Vogtle Unit 4 AP1000, Reactor Vessel Comprehensive Vibration Assessment Examination (CVAP) Program Plan, Rev. 01
WDI-SSP-1339, Visual Examination of Reactor Vessel and Internals for Vogtle Units 3 & 4 AP1000 (CVAP), Rev. 1
CRs: 684772, 795515, 50157005, 50155100, 471639
TEs: 688249, 911375, 795974, 440287

Section 3T02

Procedures:

4-DWS-OTS-17-001, Demineralized Water Transfer and Storage System Check Valve Exercise, Ver. 1.0

Work Orders:

1196008

Section 3T03

2.2.05.07a.i-U4-CP, ITAAC Completion Package, Rev. 0
SV4-VES-T0W-1202907, (ITAAC) PERFORM 4-VES-ITPP-501, Rev. 0
4-VES-ITPP-501, Main Control Room Emergency Habitability System PreOperational Test Procedure, Ver. 1.0
NUCON International, Test Report 12 VOGTL 1867, 6/19/2023

Section 3T04

SV4-VES-T0W-1202907, Perform 4-VES-ITPP-501, Rev. 0
4-VES-ITPP-501, Main Control Room Emergency Habitability System Preoperational Test Procedure, Ver. 1.0
APP-VES-GEF-509, VES Preoperational Test Specification Acceptance Criteria Clarification (ESR 50177072), Rev. 0
2.2.05.07c-U4-CP, ITAAC Completion Package, Rev. 0
2.2.05.07c-U4-PRF, Principal Closure Document Review Form, Rev. 0
WO# 1202907, 1036355

Section 3P01

B-RFL-FHP-031, Fuel Handling Control Procedure, Ver. D=0.3
RWP-23-041, Unit 4 initial fuel load and all associated work, Rev. 0
4-GOP-301-006, Mode 6 Change Checklist, Ver. 1.0

4-GOP-301-007, Core Alterations And Fuel Movement Checklists, Ver. 1
B-RFL-FHP-028, Limitations & Precautions for Handling New & Partially Spent Fuel, Ver. B=.1
NMP-RE-007, Core Verification, Ver. 6.0
4-GEN-ITPS-601, Initial Fuel Load Startup test Procedure, Ver. 1.0

LIST OF ACRONYMS

COL	Combined License
DCO	Division of Construction Oversight
DRS	Division of Reactor Safety
HEPA	high efficiency particulate air
IMC	Inspection Manual Chapter
IR	inspection report
ITAAC	inspections, tests, analyses, and acceptance criteria
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PMS	protection and safety monitoring system
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report
VEGP	Vogtle Electric Generating Plant
WLS	liquid radwaste system

ITAAC INSPECTED

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
78	2.1.03.07.i	7. The reactor internals will withstand the effects of flow induced vibration. 10. The reactor lower internals assembly is equipped with holders for at least eight capsules for storing material surveillance specimens.	i) Not used per Amendment No. 150. ii) A pre-test inspection, a flow test and a post-test inspection will be conducted on the as-built reactor internals. Inspection of the reactor lower internals assembly for the presence of capsules will be performed.	i) Not used per Amendment No. 150. ii) The as-built reactor internals have no observable damage or loose parts. At least eight capsules are in the reactor lower internals assembly.
117	2.2.01.11a.iv	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.	iv) Exercise testing of the check valves with active safety functions identified in Table 2.2.1-1 will be performed under preoperational test pressure, temperature and fluid flow conditions.	iv) Each check valve changes position as indicated in Table 2.2.1-1.

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
265	2.2.05.07a.i	<p>7.a) The VES provides a 72-hour supply of breathable quality air for the occupants of the MCR. 7.b) The VES maintains the MCR pressure boundary at a positive pressure with respect to the surrounding areas. 7.d) The system provides a passive recirculation flow of MCR air to maintain main control room dose rates below an acceptable level during VES operation. 8. Safety-related displays identified in Table 2.2.5-1 can be retrieved in the MCR. 9.a) Controls exist in the MCR to cause remotely operated valves identified in Table 2.2.5-1 to perform their active functions. 9.b) The valves identified in Table 2.2.5-1 as having PMS control perform their active safety function after receiving a signal from the PMS. 10. After loss of motive power, the remotely operated valves identified in Table 2.2.5-1 assume the indicated loss of motive power position. 11. Displays of the parameters identified in Table 2.2.5-3 can</p>	<p>i) Testing will be performed to confirm that the required amount of air flow is delivered to the MCR. iii) MCR air samples will be taken during VES testing and analyzed for quality. i) Testing will be performed with VES flow rate between 60 and 70 scfm to confirm that the MCR is capable of maintaining the required pressurization of the pressure boundary. ii) Air leakage into the MCR will be measured during VES testing using a tracer gas. Testing will be performed to confirm that the required amount of air flow circulates through the MCR passive filtration system. Inspection will be performed for retrievability of the safety-related displays in the MCR. Stroke testing will be performed on remotely operated valves identified in Table 2.2.5-1 using the controls in the MCR. Testing will be performed on remotely operated valves listed in Table 2.2.5-1 using real or simulated signals into the PMS. Testing of the remotely operated valves will be</p>	<p>i) The air flow rate from the VES is at least 60 scfm and not more than 70 scfm. iii) The MCR air is of breathable quality. i) The MCR pressure boundary is pressurized to greater than or equal to 1/8-in. water gauge with respect to the surrounding area. ii) Air leakage into the MCR is less than or equal to 10 cfm. The air flow rate at the outlet of the MCR passive filtration system is at least 600 cfm greater than the flow measured by VES-003A/B. Safety-related displays identified in Table 2.2.5-1 can be retrieved in the MCR. Controls in the MCR operate to cause remotely operated valves identified in Table 2.2.5-1 to perform their active safety functions. The remotely operated valves identified in Table 2.2.5-1 as having PMS control perform the active safety function identified in the table after receiving a signal from the PMS. After loss of motive power, each remotely operated valve identified in Table 2.2.5-1 assumes the indicated loss of</p>

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
		be retrieved in the MCR. 12. The background noise level in the MCR does not exceed 65 dB(A) at the operator workstations when VES is operating.	performed under the conditions of loss of motive power. Inspection will be performed for retrievability of the parameters in the MCR. The as-built VES will be operated, and background noise levels in the MCR will be measured at the operator work stations with the plant not operating.	motive power position. The displays identified in Table 2.2.5-3 can be retrieved in the MCR. The background noise level in the MCR does not exceed 65 dB(A) at the operator work stations when the VES is operating.
270	2.2.05.07c	7.c) The heat loads within the MCR, the I&C equipment rooms, and the Class 1E dc equipment rooms are within design basis assumptions to limit the heatup of the rooms identified in Table 2.2.5-4.	An analysis will be performed to determine that the heat loads from as-built equipment within the rooms identified in Table 2.2.5-4 are less than or equal to the design basis assumptions.	A report exists and concludes that: the heat loads within rooms identified in Table 2.2.5-4 are less than or equal to the specified values or that an analysis report exists that concludes: <ul style="list-style-type: none"> – The temperature and humidity in the MCR remain within limits for reliable human performance for the 72-hour period. – The maximum temperature for the 72-hour period for the I&C rooms is less than or equal to 120°F. – The maximum temperature for the 72-hour period for the Class 1E dc equipment rooms is less than or equal to 120°F.

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
331	2.3.04.04.ii	4. The FPS provides for manual fire fighting capability in plant areas containing safety-related equipment.	ii) Testing will be performed by measuring the water flow rate as it is simultaneously discharged from the two highest fire-hose stations and when the water for the fire is supplied from the PCS storage tank.	ii) Water is simultaneously discharged from each of the two highest fire-hose stations in plant areas containing safety-related equipment at not less than 75 gpm.
337	2.3.04.10	10. Individual fire detectors provide fire detection capability and can be used to initiate fire alarms in areas containing safety-related equipment.	Testing will be performed on the as-built individual fire detectors in the fire areas identified in subsection 3.3, Table 3.3-3. (Individual fire detectors will be tested using simulated fire conditions.)	The tested individual fire detectors respond to simulated fire conditions.

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
530	2.5.02.06a.ii	<p>6.a) The PMS initiates an automatic reactor trip, as identified in Table 2.5.2-2, when plant process signals reach specified limits. 6.b) The PMS initiates automatic actuation of engineered safety features, as identified in Table 2.5.2-3, when plant process signals reach specified limits. 6.c) The PMS provides manual initiation of reactor trip and selected engineered safety features as identified in Table 2.5.2-4. 8.a) The PMS provides for the minimum inventory of displays, visual alerts, and fixed position controls, as identified in Table 2.5.2-5. The plant parameters listed with a "Yes" in the "Display" column and visual alerts listed with a "Yes" in the "Alert" column can be retrieved in the MCR. The fixed position controls listed with a "Yes" in the "Control" column are provided in the MCR. 8.c) Displays of the open/closed status of the reactor trip breakers can be retrieved in the MCR. 9.a) The PMS automatically removes blocks of</p>	<p>An operational test of the as-built PMS will be performed using real or simulated test signals. An operational test of the as-built PMS will be performed using real or simulated test signals. An operational test of the as-built PMS will be performed using the PMS manual actuation controls. i) An inspection will be performed for retrievability of plant parameters in the MCR. iii) An operational test of the as-built system will be performed using each MCR fixed position control. Inspection will be performed for retrievability of displays of the open/closed status of the reactor trip breakers in the MCR. An operational test of the as-built PMS will be performed using real or simulated test signals. An operational test of the as-built PMS will be performed. An operational test of the as-built PMS will be performed. With one channel in bypass, an attempt will be made to place a redundant channel in bypass.</p>	<p>ii) PMS output signals to the reactor trip switchgear are generated after the test signal reaches the specified limit. This needs to be verified for each automatic reactor trip function. Appropriate PMS output signals are generated after the test signal reaches the specified limit. These output signals remain following removal of the test signal. Tests from the actuation signal to the actuated device(s) are performed as part of the system-related inspection, test, analysis, and acceptance criteria. ii) PMS output signals are generated for reactor trip and selected engineered safety features as identified in Table 2.5.2-4 after the manual initiation controls are actuated. i) The plant parameters listed in Table 2.5.2-5 with a "Yes" in the "Display" column, can be retrieved in the MCR. iii) For each test of an as-built fixed position control listed in Table 2.5.2-5 with a "Yes" in the "Control" column, an actuation signal is generated. Tests from the actuation</p>

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
		<p>reactor trip and engineered safety features actuation when the plant approaches conditions for which the associated function is designed to provide protection. These blocks are identified in Table 2.5.2-6. 9.b) The PMS two-out-of-four initiation logic reverts to a two-out-of-three coincidence logic if one of the four channels is bypassed. All bypassed channels are alarmed in the MCR. 9.c) The PMS does not allow simultaneous bypass of two redundant channels.</p>		<p>signal to the actuated device(s) are performed as part of the system-related inspection, test, analysis and acceptance criteria. Displays of the open/closed status of the reactor trip breakers can be retrieved in the MCR. The PMS blocks are automatically removed when the test signal reaches the specified limit. The PMS two-out-of-four initiation logic reverts to a two-out-of-three coincidence logic if one of the four channels is bypassed. All bypassed channels are alarmed in the MCR. The redundant channel cannot be placed in bypass.</p>

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
603	2.6.03.04c	<p>4.c) Each IDS 24-hour battery bank supplies a dc switchboard bus load for a period of 24 hours without recharging. 4.d) Each IDS 72-hour battery bank supplies a dc switchboard bus load for a period of 72 hours without recharging. 4.e) The IDS spare battery bank supplies a dc load equal to or greater than the most severe switchboard bus load for the required period without recharging. 4.f) Each IDS 24-hour inverter supplies its ac load. 4.g) Each IDS 72-hour inverter supplies its ac load. 4.h) Each IDS 24-hour battery charger provides the PMS with two loss-of-ac input voltage signals. 5.a) Each IDS 24-hour battery charger supplies a dc switchboard bus load while maintaining the corresponding battery charged. 5.b) Each IDS 72-hour battery charger supplies a dc switchboard bus load while maintaining the corresponding battery charged. 5.c) Each IDS regulating transformer supplies an ac load when powered from the 480 V MCC. 6.</p>	<p>Testing of each 24-hour as-built battery bank will be performed by applying a simulated or real load, or a combination of simulated or real loads which envelope the battery bank design duty cycle. The test will be conducted on a battery bank that has been fully charged and has been connected to a battery charger maintained at 270 ± 2 V for a period of no less than 24 hours prior to the test. Testing of each 72-hour as-built battery bank will be performed by applying a simulated or real load, or a combination of simulated or real loads which envelope the battery bank design duty cycle. The test will be conducted on a battery bank that has been fully charged and has been connected to a battery charger maintained at 270 ± 2 V for a period of no less than 24 hours prior to the test. Testing of the as-built spare battery bank will be performed by applying a simulated or real load, or a combination of simulated or real loads which envelope the most severe of the division batteries</p>	<p>The battery terminal voltage is greater than or equal to 210 V after a period of no less than 24 hours with an equivalent load that equals or exceeds the battery bank design duty cycle capacity. The battery terminal voltage is greater than or equal to 210 V after a period of no less than 72 hours with an equivalent load that equals or exceeds the battery bank design duty cycle capacity. The battery terminal voltage is greater than or equal to 210 V after a period with a load and duration that equals or exceeds the most severe battery bank design duty cycle capacity. Each 24-hour inverter supplies a line-to-line output voltage of $208 \pm 2\%$ V at a frequency of $60 \pm 0.5\%$ Hz. Each 72-hour inverter supplies a line-to-line output voltage of $208 \pm 2\%$ V at a frequency of $60 \pm 0.5\%$ Hz. Two PMS input signals exist from each 24-hour battery charger indicating loss of ac input voltage when the loss-of-input voltage condition is simulated. Each 24-hour battery charger provides an output current of at least 150 A with an output</p>

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
		<p>Safety-related displays identified in Table 2.6.3-1 can be retrieved in the MCR.</p> <p>11. Displays of the parameters identified in Table 2.6.3-2 can be retrieved in the MCR.</p>	<p>design duty cycle. The test will be conducted on a battery bank that has been fully charged and has been connected to a battery charger maintained at 270 ± 2 V for a period of no less than 24 hours prior to the test. Testing of each 24-hour as-built inverter will be performed by applying a simulated or real load, or a combination of simulated or real loads, equivalent to a resistive load greater than 12 kW. The inverter input voltage will be no more than 210 Vdc during the test. Testing of each 72-hour as-built inverter will be performed by applying a simulated or real load, or a combination of simulated or real loads, equivalent to a resistive load greater than 7 kW. The inverter input voltage will be no more than 210 Vdc during the test. Testing will be performed by simulating a loss of input voltage to each 24-hour battery charger. Testing of each as-built 24-hour battery charger will be performed by applying a simulated or real load, or a combination of simulated or real loads. Testing of</p>	<p>voltage in the range 210 to 280 V. Each 72-hour battery charger provides an output current of at least 125 A with an output voltage in the range 210 to 280 V. Each regulating transformer supplies a line-to-line output voltage of $208 \pm 2\%$ V. Safety-related displays identified in Table 2.6.3-1 can be retrieved in the MCR. Displays identified in Table 2.6.3-2 can be retrieved in the MCR.</p>

No.	ITAAC No.	Design Commitment	Inspections, Tests, Analysis	Acceptance Criteria
			<p>each 72-hour as-built battery charger will be performed by applying a simulated or real load, or a combination of simulated or real loads. Testing of each as-built regulating transformer will be performed by applying a simulated or real load, or a combination of simulated or real loads, equivalent to a resistive load greater than 30 kW when powered from the 480 V MCC. Inspection will be performed for retrievability of the safety-related displays in the MCR. Inspection will be performed for retrievability of the displays identified in Table 2.6.3-2 in the MCR.</p>	
797	3.3.00.07c.ii.a	7.c) Separation is maintained between Class 1E divisions in accordance with the fire areas as identified in Table 3.3-3.	ii) Inspections of the as-built fire barriers between the fire areas identified in Table 3.3-3 will be conducted.	ii.a) Results of the inspection will confirm that fire barriers exist between fire areas identified in Table 3.3-3 inside the non-radiologically controlled area of the auxiliary building.
798	3.3.00.07c.ii.b	7.c) Separation is maintained between Class 1E divisions in accordance with the fire areas as identified in Table 3.3-3.	ii) Inspections of the as-built fire barriers between the fire areas identified in Table 3.3-3 will be conducted.	ii.b) Results of the inspection will confirm that fire barriers exist between fire areas identified in Table 3.3-3 inside the radiologically controlled area of the auxiliary building.