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52-026ND-19-0833  
10 CFR 52.99(c)(3)U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-0001

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 2.6.03.04c [Index Number 603]

Ladies and Gentlemen:

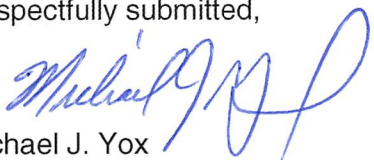
Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of July 10, 2019, Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Uncompleted Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.6.03.04c [Index Number 603] has not been completed 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 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion Plan for Uncompleted ITAAC 2.6.03.04c [Index Number 603]

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**Southern Nuclear Operating Company  
ND-19-0833  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion Plan for Uncompleted ITAAC 2.6.03.04c [Index Number 603]**

## **ITAAC Statement**

### **Design Commitment**

- 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. Safety-related displays identified in Table 2.6.3-1 can be retrieved in the MCR.
- 11. Displays of the parameters identified in Table 2.6.3-2 can be retrieved in the MCR.

### **Inspections/Tests/Analyses**

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  $270 \pm 2$  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  $270 \pm 2$  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 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  $270 \pm 2$  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 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.

#### Acceptance Criteria

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 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.

### **ITAAC Completion Description**

Multiple ITAAC are performed with inspections and tests to verify the Class 1E dc and Uninterruptible Power Supply System (IDS) 24-hour 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 IDS 72-hour 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 IDS spare 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, and that two Protection and Safety Monitoring System (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. This ITAAC also verifies 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, each 24-hour battery charger provides an output current of at least 150 A with an output 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, and each regulating transformer supplies a line-to-line output voltage of  $208 \pm 2\%$  V. This ITAAC also ensures safety-related displays identified in VEGP Combined License (COL) Appendix C Table 2.6.3-1 can be retrieved in the Main Control Room (MCR) and displays identified in Table 2.6.3-2 can be retrieved in the MCR.

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.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-IDS-ITPP-501 and 4-IDS-ITPP-501 (References 1 and 2) or as described in the Quality Release and Certificate of Conformance (References 3 and 4) for factory acceptance testing to verify that each IDS 24-hour as-built battery bank terminal voltage is greater than or equal to 210 volts (V) after a period of no less than 24 hours with an equivalent load that equals or exceeds the battery bank IDS 24-hour design duty cycle capacity.

The preoperational test is performed on a fully charged IDS 24-hour battery bank that has been connected to a charger maintained at  $270 \pm 2$  V for a period of no less than 24 hours prior to the test. A battery service test in accordance with the provisions of Institute of Electrical and Electronics Engineers (IEEE) 450-1995 at the IDS 24-hour battery bank design duty cycle capacity is performed using a load bank to simulate the plant equivalent load profile. Battery bank terminal voltages are recorded, corrected for instrument accuracy and compared to the acceptance criteria. The IDS 24-hour battery bank terminal voltage measurements are summarized in Attachment A.

If factory acceptance testing is used in lieu of preoperational testing, the test is performed on a fully charged IDS 24-hour battery bank that has been connected to a charger maintained at an equivalent of  $270 \pm 2$  V for a period of no less than 24 hours prior to the test. A battery service test in accordance with the provisions of Electrical and Electronics Engineers (IEEE) 450-1995 at the IDS 24-hour battery bank design duty cycle capacity is performed using a load bank to simulate the plant equivalent load profile. Battery bank terminal voltages are recorded, corrected for instrument accuracy and compared to the acceptance criteria. The results of the testing are documented in the Quality Release and Certificate of Conformance (References 3 and 4). The IDS 24-hour battery bank terminal voltage measurements are summarized in Attachment A.

The Unit 3 and Unit 4 preoperational test or factory acceptance test results confirm that each IDS 24-hour as-built 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 IDS 24-hour 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.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-IDS-ITPP-501 and 4-IDS-ITPP-501 (References 1 and 2) or as described in the Quality Release and Certificate of Conformance (References 3 and 4) for factory acceptance testing to verify that each IDS 72-hour as-built battery bank terminal voltage is greater than or equal to 210 volts (V) after a period of no less than 72 hours with an equivalent load that equals or exceeds the IDS 72-hour battery bank design duty cycle capacity.

The preoperational test is performed on a fully charged IDS 72-hour battery bank that has been connected to a charger maintained at  $270 \pm 2$  V for a period of no less than 24 hours prior to the test. A battery service test in accordance with the provisions of Electrical and Electronics Engineers (IEEE) 450-1995 at the IDS 72-hour battery bank design duty cycle capacity is performed using a load bank to simulate the plant equivalent load profile. Battery bank terminal voltages are recorded, corrected for instrument accuracy and compared to the acceptance criteria. The IDS 72-hour battery bank terminal voltage measurements are summarized in Attachment B.

If factory acceptance testing is used in lieu of preoperational testing, the test is performed on a fully charged IDS 72-hour battery bank that has been connected to a charger maintained at an equivalent of  $270 \pm 2$  V for a period of no less than 24 hours prior to the test. A battery service test in accordance with the provisions of Electrical and Electronics Engineers (IEEE) 450-1995 at the IDS 72-hour battery bank design duty cycle capacity is performed using a load bank to simulate the plant equivalent load profile. Battery bank terminal voltages are recorded, corrected for instrument accuracy and compared to the acceptance criteria. The results of the testing are documented in the Quality Release and Certificate of Conformance (References 3 and 4). The IDS 72-hour battery bank terminal voltage measurements are summarized in Attachment B.

The Unit 3 and Unit 4 preoperational test or factory acceptance test results confirm that each IDS 72-hour as-built battery bank 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 IDS 72-hour 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.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-IDS-ITPP-501 and 4-IDS-ITPP-501 (References 1 and 2) or as described in the Quality Release and Certificate of Conformance (References 3 and 4) for factory acceptance testing to verify that the IDS spare as-built battery bank 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 IDS battery bank design duty cycle capacity.

The preoperational test is performed on a fully charged IDS spare battery bank that has been connected to a charger maintained at  $270 \pm 2$  V for a period of no less than 24 hours prior to the test. A battery service test in accordance with the provisions of Electrical and Electronics Engineers (IEEE) 450-1995 at the IDS spare battery bank design duty cycle capacity is performed using a load bank to simulate the most severe plant equivalent load profile from any of the 24 or 72 hour IDS divisions. Battery bank terminal voltages are recorded, corrected for instrument accuracy and compared to the acceptance criteria. The battery terminal voltage at test completion is XXX V for the Unit 3 IDS spare battery bank and XXX V for the Unit 4 IDS spare battery bank which demonstrates the IDS spare batteries meet the acceptance criteria.

If factory acceptance testing is used in lieu of preoperational testing, the test is performed on a fully charged IDS spare battery bank that has been connected to a charger maintained at an equivalent of  $270 \pm 2$  V for a period of no less than 24 hours prior to the test. A battery service test in accordance with the provisions of Electrical and Electronics Engineers (IEEE) 450-1995 at the IDS spare battery bank design duty cycle capacity is performed using a load bank to simulate the plant equivalent load profile. Battery bank terminal voltages are recorded, corrected for instrument accuracy and compared to the acceptance criteria. The results of the testing are documented in the Quality Release and Certificate of Conformance (References 3 and 4). The battery terminal voltage at test completion is XXX V for the Unit 3 IDS spare battery bank and XXX V for the Unit 4 IDS spare battery bank which demonstrates the IDS spare batteries meet the acceptance criteria.

The Unit 3 and Unit 4 preoperational test or factory acceptance test results confirm that each IDS spare as-built battery bank 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 IDS 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.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-IDS-ITPP-501 and 4-IDS-ITPP-501 (References 1 and 2) to demonstrate that each IDS 24-hour inverter identified in Table 2.6.3-1 (Attachment C) supplies its ac load.

A load test is performed on each 24-hour inverter by applying a simulated load greater than 12 kilowatts (kW) with input voltage less than or equal to 210Vdc. Inverter input voltage, output voltage, and output frequency are measured during the test, corrected for instrument accuracy and compared to the acceptance criteria. The output voltage is verified to meet the specified

acceptance criteria of  $208 \pm 2\%$  V at a frequency of  $60 \pm 0.5\%$  Hertz (Hz). The results are tabulated in Attachment C for each IDS 24-hour inverter.

The Unit 3 and Unit 4 preoperational test results confirm that each IDS 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.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-IDS-ITPP-501 and 4-IDS-ITPP-501 (References 1 and 2) to demonstrate that each IDS 72-hour inverter identified in Table 2.6.3-1 (Attachment D) supplies its ac load.

A load test is performed on each 72-hour inverter by applying a simulated load greater than 7 kW with input voltage less than or equal to 210Vdc. Inverter input voltage, output voltage, and output frequency are measured during the test, corrected for instrument accuracy and compared to the acceptance criteria. The output voltage is verified to meet the specified acceptance criteria of  $208 \pm 2\%$  V at a frequency of  $60 \pm 0.5\%$  Hertz (Hz). The results are tabulated in Attachment D for each IDS 72-hour inverter.

The Unit 3 and Unit 4 preoperational test results confirm that each IDS 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.

Testing is performed in accordance with Unit 3 and Unit 4 component test packages SNC921220 and SNCXXXXXX (References 5 and 6) to confirm 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.

The component test establishes the initial conditions of the IDS Class 1E DC systems aligned and in service in accordance with the operating procedure. The division A battery charger input breaker is opened and both "Battery Charger UV" bistables are verified to be tripped. The division A battery charger input breaker is closed and both division A "Battery Charger UV" bistable trip indications are verified to have cleared. This testing is repeated for the remaining 24-hour battery chargers and the results are tabulated in Attachment E.

The Unit 3 and Unit 4 test results confirm that 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 voltage in the range 210 to 280 V.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-IDS-ITPP-501 and 4-IDS-ITPP-501 (References 1 and 2) to confirm that each IDS 24-hour battery charger identified in Table 2.6.3-4 (Attachment F) provides an output current of at least 150 A with an output voltage in the range 210 to 280 V.

The IDS 24-hour battery bank and dc switchboard are disconnected from the IDS 24-hour battery charger and a load bank is then connected to the output of the battery charger. The IDS 24-hour battery charger current and output voltage are measured using the battery charger installed instrumentation and recorded hourly for 8 hours. The recorded voltage and current remain within the acceptance criteria for each IDS 24-hour battery charger. Output voltage and current are tabulated in Attachment F and demonstrate the IDS as-built 24-hour battery chargers meet the acceptance criteria.

The Unit 3 and Unit 4 preoperational test results confirm that each IDS 24-hour battery charger provides an output current of at least 150 A with an output 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.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-IDS-ITPP-501 and 4-IDS-ITPP-501 (References 1 and 2) to confirm that each IDS 72-hour battery charger provides an output current of at least 125 A with an output voltage in the range 210 to 280 V.

The IDS 72-hour battery bank and DC switchboard are disconnected from the IDS 72-hour battery charger and a load bank is then connected to the output of the charger. The IDS 72-hour battery charger operation and output voltage are measured using the charger installed instrumentation and recorded hourly for 8 hours. The recorded voltage and current remain within the acceptance criteria for each IDS 72-hour battery charger. Output voltage and current are tabulated in Attachment G and demonstrate the IDS 72-hour battery chargers meet the acceptance criteria.

The Unit 3 and Unit 4 preoperational test results confirm that each IDS 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.

Testing is performed in accordance with Unit 3 and Unit 4 preoperational test procedures 3-IDS-ITPP-501 and 4-IDS-ITPP-501 (References 1 and 2) to confirm that each regulating transformer supplies a line-to-line output voltage of  $208 \pm 2\%$  V.

The IDS system is aligned with the division A regulating transformer powered from the 480 V Motor Control Center and supplying a distribution panel with a load bank attached to the distribution panel. The load bank is then adjusted to greater than 30 KW and the division A regulating transformer output is recorded. This testing is repeated for the remaining division inverters. The regulating transformer line to line voltages are tabulated in Attachment H.

The Unit 3 and Unit 4 preoperational test results confirm that 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.

An inspection is performed to verify the retrievability of the Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 safety-related displays in the MCR. The inspection for retrievability

confirms that the safety-related displays of the parameters identified in COL Appendix C Table 2.6.3-1 (Attachment I) can be retrieved in the MCR.

The inspection is performed in accordance the Unit 3 and Unit 4 component test package work orders (References 7 and 8, respectively) for IDS component indication verifications, and visually confirms that when each of the safety-related displays identified in Attachment I is summoned at the MCR Protection and Safety Monitoring System (PMS) Visual Display Units (VDUs), the summoned safety-related display appears on the PMS VDU.

The Unit 3 and Unit 4 component test results (References 7 and 8, respectively) confirm that the VEGP Unit 3 and Unit 4 safety-related displays listed in Attachment I can be retrieved in the MCR.

Displays identified in Table 2.6.3-2 can be retrieved in the MCR.

An inspection is performed to verify the retrievability of the VEGP Unit 3 and Unit 4 plant parameters in the Main Control Room (MCR). The inspection for retrievability confirms that the displays of the parameters identified in COL Appendix C Table 2.6.3-2 (Attachment J) can be retrieved in the MCR.

The inspection is performed in accordance with the Unit 3 and Unit 4 component test package work orders (References 7 and 8, respectively) for IDS component indication verifications, and visually confirms that when each of the displays of parameters identified in Attachment J is summoned at an MCR workstation, the summoned plant parameter appears on a display monitor at that MCR workstation.

The Unit 3 and Unit 4 component test results (References 7 and 8, respectively) confirm that the VEGP Unit 3 and Unit 4 plant parameter displays listed in Attachment J can be retrieved in the MCR.

References 1 through 8 are available for NRC inspection as part of Unit 3 and Unit 4 ITAAC Completion Packages (Reference 9 and 10).

### **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. 3-IDS-ITPP-501, "Class 1E DC and UPS Preoperational Test"
2. 4-IDS-ITPP-501, "Class 1E DC and UPS Preoperational Test"
3. XXXXXXXXXXXX, Unit 3 "DB01 Quality Release and Certificate of Conformance"
4. YYYYYYYYYYYY, Unit 4 "DB01 Quality Release and Certificate of Conformance"
5. SNC921220 "Class 1E DC and Uninterruptible Power Supply System Undervoltage Verifications – ITAAC: SV3-2.6.03.04c Item 4.h"
6. SNCXXXX "Class 1E DC and Uninterruptible Power Supply System Undervoltage Verifications – ITAAC: SV4-2.6.03.04c Item 4.h"

7. SNC921224, "Retrievability of IDS Displays and Parameters ITAAC: SV3-2.6.03.04c Items 6 and 11"
8. SNCXXXXXX, "Retrievability of IDS Displays and Parameters ITAAC: SV4-2.6.03.04c Items 6 and 11"
9. 2.6.03.04c-U3-CP-Rev 0, ITAAC Completion Package
10. 2.6.03.04c-U4-CP-Rev 0, ITAAC Completion Package
11. IEEE Std 450-1995, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Vented Lead-Acid Batteries for Stationary Applications"
12. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

**Attachment A**

<b>Unit</b>	<b>Equipment Name</b>	<b>Tag No.</b>	<b>Battery Bank Terminal Voltage</b>
3	Division A 250 Vdc 24-Hour Battery Bank	IDSA-DB-1	XXX
3	Division B 250 Vdc 24-Hour Battery Bank 1	IDSB-DB-1	XXX
3	Division C 250 Vdc 24-Hour Battery Bank 1	IDSC-DB-1	XXX
3	Division D 250 Vdc 24-Hour Battery Bank	IDSD-DB-1	XXX
4	Division A 250 Vdc 24-Hour Battery Bank	IDSA-DB-1	XXX
4	Division B 250 Vdc 24-Hour Battery Bank 1	IDSB-DB-1	XXX
4	Division C 250 Vdc 24-Hour Battery Bank 1	IDSC-DB-1	XXX
4	Division D 250 Vdc 24-Hour Battery Bank	IDSD-DB-1	XXX

**Attachment B**

<b>Unit</b>	<b>Equipment Name</b>	<b>Tag No.</b>	<b>Battery Bank Terminal Voltage</b>
3	Division B 250 Vdc 72-Hour Battery Bank 2	IDSB-DB-2	XXX
3	Division C 250 Vdc 72-Hour Battery Bank 2	IDSC-DB-2	XXX
4	Division B 250 Vdc 72-Hour Battery Bank 2	IDSB-DB-2	XXX
4	Division C 250 Vdc 72-Hour Battery Bank 2	IDSC-DB-2	XXX

**Attachment C**

<b>Unit</b>	<b>Equipment Name</b>	<b>Tag No.</b>	<b>Recorded Output Voltage Range (203.84 – 212.16)</b>	<b>Recorded Frequency Range (59.7 – 60.3)</b>
3	Division A 24-Hour Inverter 1	IDSA-DU-1	XXX.XX-YYY.YY	XX.X-YY.Y
3	Division B 24-Hour Inverter 1	IDSB-DU-1	XXX.XX-YYY.YY	XX.X-YY.Y
3	Division C 24-Hour Inverter 1	IDSC-DU-1	XXX.XX-YYY.YY	XX.X-YY.Y
3	Division D 24-Hour Inverter 1	IDSD-DU-1	XXX.XX-YYY.YY	XX.X-YY.Y
4	Division A 24-Hour Inverter 1	IDSA-DU-1	XXX.XX-YYY.YY	XX.X-YY.Y
4	Division B 24-Hour Inverter 1	IDSB-DU-1	XXX.XX-YYY.YY	XX.X-YY.Y
4	Division C 24-Hour Inverter 1	IDSC-DU-1	XXX.XX-YYY.YY	XX.X-YY.Y
4	Division D 24-Hour Inverter 1	IDSD-DU-1	XXX.XX-YYY.YY	XX.X-YY.Y

**Attachment D**

<b>Unit</b>	<b>Equipment Name</b>	<b>Tag No.</b>	<b>Recorded Output Voltage Range (203.84 – 212.16)</b>	<b>Recorded Frequency Range (59.7 – 60.3)</b>
3	Division B 72-Hour Inverter 2	IDSB-DU-2	XXX.XX-YYY.YY	XX.X-YY.Y
3	Division C 72-Hour Inverter 2	IDSC-DU-2	XXX.XX-YYY.YY	XX.X-YY.Y
4	Division B 72-Hour Inverter 2	IDSB-DU-2	XXX.XX-YYY.YY	XX.X-YY.Y
4	Division C 72-Hour Inverter 2	IDSC-DU-2	XXX.XX-YYY.YY	XX.X-YY.Y

**Attachment E**

<b>Unit</b>	<b>Equipment Name</b>	<b>*Tag No.</b>	<b>Battery Charger UV PMS Alarms</b>
3	Division A 24-Hour Battery Charger 1	IDSA-DC-1	Yes
3	Division B 24-Hour Battery Charger 1	IDSB-DC-1	Yes
3	Division C 24-Hour Battery Charger 1	IDSC-DC-1	Yes
3	Division D 24-Hour Battery Charger 1	IDSD-DC-1	Yes
4	Division A 24-Hour Battery Charger 1	IDSA-DC-1	Yes
4	Division B 24-Hour Battery Charger 1	IDSB-DC-1	Yes
4	Division C 24-Hour Battery Charger 1	IDSC-DC-1	Yes
4	Division D 24-Hour Battery Charger 1	IDSD-DC-1	Yes

**Attachment F**

<b>Unit</b>	<b>Equipment Name</b>	<b>*Tag No.</b>	<b>Output Voltage Range (210 - 280 V)</b>	<b>Minimum Recorded Current</b>
3	Division A 24-Hour Battery Charger 1	IDSA-DC-1	XXX-YYY	XXX
3	Division B 24-Hour Battery Charger 1	IDSB-DC-1	XXX-YYY	XXX
3	Division C 24-Hour Battery Charger 1	IDSC-DC-1	XXX-YYY	XXX
3	Division D 24-Hour Battery Charger 1	IDSD-DC-1	XXX-YYY	XXX
3	Spare Battery Charger 1	IDSS-DC-1	XXX-YYY	XXX
4	Division A 24-Hour Battery Charger 1	IDSA-DC-1	XXX-YYY	XXX
4	Division B 24-Hour Battery Charger 1	IDSB-DC-1	XXX-YYY	XXX
4	Division C 24-Hour Battery Charger 1	IDSC-DC-1	XXX-YYY	XXX
4	Division D 24-Hour Battery Charger 1	IDSD-DC-1	XXX-YYY	XXX
4	Spare Battery Charger 1	IDSS-DC-1	XXX-YYY	XXX

### Attachment G

Unit	Equipment Name	Tag No.	Output Voltage Range (210 - 280 V)	Minimum Recorded Current
3	Division B 72-Hour Battery Charger 2	IDSB-DC-2	XXX-YYY	XXX
3	Division C 72-Hour Battery Charger 2	IDSC-DC-2	XXX-YYY	XXX
4	Division B 72-Hour Battery Charger 2	IDSB-DC-2	XXX-YYY	XXX
4	Division C 72-Hour Battery Charger 2	IDSC-DC-2	XXX-YYY	XXX

### Attachment H

Unit	Equipment Name	Tag No.	Line-to-Line Voltage		
			A-B	B-C	A-C
3	Division A Regulating Transformer	IDSA-DT-1	XXX.X	XXX.X	XXX.X
3	Division A Regulating Transformer	IDSA-DT-1	XXX.X	XXX.X	XXX.X
3	Division A Regulating Transformer	IDSA-DT-1	XXX.X	XXX.X	XXX.X
3	Division A Regulating Transformer	IDSA-DT-1	XXX.X	XXX.X	XXX.X
4	Division A Regulating Transformer	IDSA-DT-1	XXX.X	XXX.X	XXX.X
4	Division A Regulating Transformer	IDSA-DT-1	XXX.X	XXX.X	XXX.X
4	Division A Regulating Transformer	IDSA-DT-1	XXX.X	XXX.X	XXX.X
4	Division A Regulating Transformer	IDSA-DT-1	XXX.X	XXX.X	XXX.X

### Attachment I

#### \*Excerpt from COL Appendix C Table 2.6.3-1

Unit	*Equipment Name	*Tag No.	*Safety-Related Display
3	Division A 250 Vdc Switchboard 1	IDSA-DS-1	Yes (Bus Voltage)
3	Division B 250 Vdc Switchboard 1	IDSB-DS-1	Yes (Bus Voltage)
3	Division B 250 Vdc Switchboard 2	IDSB-DS-2	Yes (Bus Voltage)
3	Division C 250 Vdc Switchboard 1	IDSC-DS-1	Yes (Bus Voltage)
3	Division C 250 Vdc Switchboard 2	IDSC-DS-2	Yes (Bus Voltage)
3	Division D 250 Vdc Switchboard 1	IDSD-DS-1	Yes (Bus Voltage)
4	Division A 250 Vdc Switchboard 1	IDSA-DS-1	Yes (Bus Voltage)
4	Division B 250 Vdc Switchboard 1	IDSB-DS-1	Yes (Bus Voltage)
4	Division B 250 Vdc Switchboard 2	IDSB-DS-2	Yes (Bus Voltage)
4	Division C 250 Vdc Switchboard 1	IDSC-DS-1	Yes (Bus Voltage)
4	Division C 250 Vdc Switchboard 2	IDSC-DS-2	Yes (Bus Voltage)
4	Division D 250 Vdc Switchboard 1	IDSA-DS-1	Yes (Bus Voltage)



**Attachment J**

**\*Excerpt from COL Appendix C Table 2.6.3-2**

<b>Unit</b>	<b>*Equipment</b>	<b>*Tag No.</b>	<b>*Display/Status Indication</b>
3	Division A Battery Monitor	IDSA-DV-1	Yes (Battery Ground Detection, Battery High Discharge Rate)
3	Division B 24-Hour Battery Monitor	IDSB-DV-1	Yes (Battery Ground Detection, Battery High Discharge Rate)
3	Division B 72-Hour Battery Monitor	IDSB-DV-2	Yes (Battery Ground Detection, Battery High Discharge Rate)
3	Division C 24-Hour Battery Monitor	IDSC-DV-1	Yes (Battery Ground Detection, Battery High Discharge Rate)
3	Division C 72-Hour Battery Monitor	IDSC-DV-2	Yes (Battery Ground Detection, Battery High Discharge Rate)
3	Division D Battery Monitor	IDSD-DV-1	Yes (Battery Ground Detection, Battery High Discharge Rate)
3	Division A Fused Transfer Switch Box	IDSA-DF-1	Yes (Battery Current, Battery Disconnect Switch Position)
3	Division B 24-Hour Fused Transfer Switch Box	IDSB-DF-1	Yes (Battery Current, Battery Disconnect Switch Position)
3	Division B 72-Hour Fused Transfer Switch Box	IDSB-DF-2	Yes (Battery Current, Battery Disconnect Switch Position)
3	Division C 24-Hour Fused Transfer Switch Box	IDSC-DF-1	Yes (Battery Current, Battery Disconnect Switch Position)
3	Division C 72-Hour Fused Transfer Switch Box	IDSC-DF-2	Yes (Battery Current, Battery Disconnect Switch Position)
3	Division D Fused Transfer Switch Box	IDSD-DF-1	Yes (Battery Current, Battery Disconnect Switch Position)
3	Division A Battery Charger	IDSA-DC-1	Yes (Charger Output Current, Charger Trouble(1))
3	Division B 24-Hour Battery Charger	IDSB-DC-1	Yes (Charger Output Current, Charger Trouble(1))

Unit	*Equipment	*Tag No.	*Display/Status Indication
3	Division B 72-Hour Battery Charger	IDSB-DC-2	Yes (Charger Output Current, Charger Trouble(1))
3	Division C 24-Hour Battery Charger	IDSC-DC-1	Yes (Charger Output Current, Charger Trouble(1))
3	Division C 72-Hour Battery Charger	IDSC-DC-2	Yes (Charger Output Current, Charger Trouble(1))
3	Division D Battery Charger	IDSD-DC-1	Yes (Charger Output Current, Charger Trouble(1))
4	Division A Battery Monitor	IDSA-DV-1	Yes (Battery Ground Detection, Battery High Discharge Rate)
4	Division B 24-Hour Battery Monitor	IDSB-DV-1	Yes (Battery Ground Detection, Battery High Discharge Rate)
4	Division B 72-Hour Battery Monitor	IDSB-DV-2	Yes (Battery Ground Detection, Battery High Discharge Rate)
4	Division C 24-Hour Battery Monitor	IDSC-DV-1	Yes (Battery Ground Detection, Battery High Discharge Rate)
4	Division C 72-Hour Battery Monitor	IDSC-DV-2	Yes (Battery Ground Detection, Battery High Discharge Rate)
4	Division D Battery Monitor	IDSD-DV-1	Yes (Battery Ground Detection, Battery High Discharge Rate)
4	Division A Fused Transfer Switch Box	IDSA-DF-1	Yes (Battery Current, Battery Disconnect Switch Position)
4	Division B 24-Hour Fused Transfer Switch Box	IDSB-DF-1	Yes (Battery Current, Battery Disconnect Switch Position)
4	Division B 72-Hour Fused Transfer Switch Box	IDSB-DF-2	Yes (Battery Current, Battery Disconnect Switch Position)
4	Division C 24-Hour Fused Transfer Switch Box	IDSC-DF-1	Yes (Battery Current, Battery Disconnect Switch Position)
4	Division C 72-Hour Fused Transfer Switch Box	IDSC-DF-2	Yes (Battery Current, Battery Disconnect Switch Position)
4	Division D Fused Transfer Switch Box	IDSD-DF-1	Yes (Battery Current, Battery Disconnect Switch Position)

Unit	*Equipment	*Tag No.	*Display/Status Indication
4	Division A Battery Charger	IDSA-DC-1	Yes (Charger Output Current, Charger Trouble(1))
4	Division B 24-Hour Battery Charger	IDSB-DC-1	Yes (Charger Output Current, Charger Trouble(1))
4	Division B 72-Hour Battery Charger	IDSB-DC-2	Yes (Charger Output Current, Charger Trouble(1))
4	Division C 24-Hour Battery Charger	IDSC-DC-1	Yes (Charger Output Current, Charger Trouble(1))
4	Division C 72-Hour Battery Charger	IDSC-DC-2	Yes (Charger Output Current, Charger Trouble(1))
4	Division D Battery Charger	IDSD-DC-1	Yes (Charger Output Current, Charger Trouble(1))

**Note : (1) Battery charger trouble includes charger dc output under/over voltage**