

Example D34 - Battery Bank Load Testing ITAAC Closure Notification

XX/YY/ZZZZ (Date)

To: NRC

From: {Name of Licensee}
{Site Name and Unit #}
{Docket #}

Subject: Completion of ITAAC 2.6 03.04c

The purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) in accordance with 10 CFR 52.99(c)(1) of the completion of {Site Name and Unit #} Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) Item 2.6 03.04c to verify that the battery terminal voltage is greater than or equal to 210 Volt (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 closure process for this ITAAC is based on the guidance described in NEI 08-01 (Reference 1).

ITAAC Statement

Design Commitment:

Each IDS 24-hour battery bank supplies a dc switchboard bus load for a period of 24 hours without recharging.

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 ± 2 V for a period of no less than 24 hours prior to the test.

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.

ITAAC Determination Basis

Testing was performed in accordance with Preoperational Test Procedure APP-IDS-T1P-502 (Reference 3) to demonstrate that each Class 1E dc and Uninterruptible Power Supply System (IDS) 24-hour battery bank identified in AP1000 Tier 1 Design Description (see Attachment 1) supplies a Direct Current (dc) switchboard bus load for a period of 24 hours without recharging. A battery discharge performance test for each 24 hour IDS battery bank was performed by

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connecting the battery bank to a battery charger maintained at 270 ± 2 V for 24 hours to fully charge the battery, and then applying a simulated load that enveloped the battery bank design duty cycle. Battery terminal voltage was continuously monitored and recorded throughout the 24 hour charging period and the 24 hour discharge test, and was verified to be greater than or equal to 210 V after a discharge period of 24 hours for each battery bank.

The Test Results Report (Reference 3) confirmed that the battery terminal voltage is greater than or equal to 210 V after a period of 24 hours with an equivalent load that equals or exceeds the battery bank design duty cycle capacity.

ITAAC Finding Review

In accordance with XXX-XXX-XXX (project specific procedure for ITAAC completion), {Licensee} performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review found that 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 03.04c (Reference 2) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, [Licensee] hereby notifies the NRC that ITAAC 2.6 03.04c was performed, and that the prescribed acceptance criteria are met.

Systems, structures and components verified as part this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

We request 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 XXX at xxx-xxx-xxxx.

Sincerely,

{Signature of Licensee Representative}
{Typed Name of Licensee Representative}
{Title of Licensee Representative}

References (available for NRC inspection)

1. NEI 08-01, Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52.
2. ITAAC 2.6 03.04c Completion Package
3. Completed Preoperational Test Procedure APP-IDS-T1P-502 which includes the associated Test Results Report

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Attachment 1
24-HOUR BATTERY BANKS LISTED in AP1000 DCD TIER 1 TABLE 2.6.3-1

Table 2.6.3-1	
Equipment Name	Tag No.
Division A 250 Vdc 24-Hour Battery Bank	IDSA-DB-1
Division B 250 Vdc 24-Hour Battery Bank 1	IDSB-DB-1
Division C 250 Vdc 24-Hour Battery Bank 1	IDSC-DB-1
Division D 250 Vdc 24-Hour Battery Bank	IDSD-DB-1