Revised Example D36 – 24-hour Inverter 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 03.04f

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 03.04f to verify that each Uninterruptible Power Supply System (IDS) 24-hour inverter supplies ~~a line-to-line output voltage of 208 ± 2% Volt (V) at a frequency of 60 ± 0.5% Hertz (Hz)~~its design load. 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 inverter supplies its ac load.

Inspections, Tests, Analyses:

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.

Acceptance Criteria:

Each 24-hour inverter supplies a line-to-line output voltage of 208 ± 2% V at a frequency of 60 ± 0.5% Hz.

ITAAC Determination Basis

Testing was performed in accordance with Preoperational Test Procedure APP-IDS-T1P-501 (Reference 3) to demonstrate that each ~~Class 1E dc and Uninterruptible Power Supply System (~~IDS~~)~~ 24-hour inverter identified in the AP1000 Tier 1 ~~Design Description~~Table 2.6.3-1 (see Attachment 1) supplies its Alternating Current (ac) load. A load test was performed on each 24-hour inverter by applying a simulated load greater than the inverter's design capacity of 12 kW with minimum input voltage (no more than 210Vdc). Key parameters were continuously monitored and recorded during the test, including input voltage, resistive applied load, output

Formatted: English (U.S.)

voltage, and output frequency. Output voltage was verified to meet the specified acceptance criteria of~~be~~ 208 ± 2% V at a frequency of 60 ± 0.5% Hz.

The Test Results Report (TRR) (Reference 3) confirmed that each 24-hour inverter supplies a line-to-line output voltage of 208 ± 2% V at a frequency of 60 ± 0.5% Hz.

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 ITAAC Completion Package for ITAAC 2.6 03.04f (Reference 2) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, [Licensee] hereby notifies the NRC that ITAAC 2.6 03.04f 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 03.04f Completion Package
3. Archived completed Preoperational Test Procedure APP-IDS-T1P-501 which includes the associated Test Results Report (TRR)

Formatted: English (U.S.)

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

~~Table 2.6.3-1~~	
Equipment Name	**Tag No.**
Division A 24-Hour Inverter 1	IDSA-DU-1
Division B 24-Hour Inverter 1	IDSB-DU-1
Division C 24-Hour Inverter 1	IDSC-DU-1
Division D 24-Hour Inverter 1	IDSD-DU-1

Formatted: English (U.S.)